

EXHIBIT A

ELGIN SECURITY CONSULTANTS INC.

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April 14, 2016

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Suite 900
Salt Lake City, UT
84111

Re: Chatwin v. Draper City, et al.

Civil No. 2:14-cv-375

United States District Court for the District Of Utah, Central Division

Mr. Hamilton:

Opinions and Bases

1. At your request, I have reviewed the material provided in respect to this matter. Based upon our brief discussions my understanding is that my comments are to address the issues around the following points:
 - Police training in subject control and self-defense and how that training might impact the interpretation of an event from a police point of view compared to that of a person who has not had or is unfamiliar of this type of training.
 - Testing conducted in respect to the position of the parties (police and civilian) and the motor vehicles and what can and cannot be seen by a person standing inside the front window of the Torrence residence.
 - The operation of the holster design as described by Officer Patterson and any risk of defeating the retention mechanism while a person is handcuffed with standard handcuffs behind one's back.
 - How and why two people can perceive the same event differently.
 - Human visual considerations in respect to this incident.
 - How a person's focus of attention can influence what they perceive when viewing an event.This report will attempt to address these points as well as complimentary issues associated with these phenomena.
2. The information provided with respect to timing issues related to dynamic events, police response capacities, and subject control tactics in relation to securing and controlling a handcuffed subject by police officers, is based upon my experience being trained as a police officer attending classes, courses, seminars and symposiums throughout North America as well as my experience as a trainer engaged in similar processes throughout Canada and the United States since 1983. The details of my experience as a police officer and trainer are contained

within my curriculum vitae. Information concerning other aspects I will address are supported with empirical evidence where available.

3. The information provided with respect to the effects a dynamic encounter may have on a witness or involved party's perception of an event are aspects of police training I have been providing to police officers beginning in 1996, including police officers participating in courses at the instructor level. In addition, these same issues have been taught to police investigators, legal counsel, civilian oversight investigators and other interested parties (e.g., law school faculty, psychologists) during courses taught in Canada, England, and the United States in which I participated as a facilitator and instructor over the past several years.
4. My analysis and comments on this incident are based upon a combination of 36 years of police operational and training experience. My operational experience was collected over 16 years within two different police services including one of Canada's largest, while my instructional experience consists of 33 years in both physical skills and academic environments including 20 years instructing at one of North America's largest police training facilities. Additionally I have been involved in the following activities:
 - Provided training, consultation, comment, and presentations regarding police use of force throughout Canada, as well as in the United States, England and Australia.
 - Permitted to offer expert opinion evidence on police procedures, police training and use of force related issues to courts within Ontario, Alberta, British Columbia, Newfoundland, and Quebec as well as in state court Utah and federal court in Alabama.
 - Provided testimony before the House of Commons Standing Committee on Public Safety and National Security.
 - Deposed as a police procedures expert in civil suits in the states of Alabama, Florida, Illinois, Kansas, Nevada and Wyoming.
 - Completed a Master's degree and major project entitled, "Police Response to Excited Delirium."
 - Consulted regularly on police use of force, operational, and training issues throughout Canada at the local, provincial and federal level as well as on U.S. local, state and federal matters.
 - Retained to offer an opinion on a police use of force incident involving sworn police officers in England.
 - Authored and co-authored police related articles, including peer reviewed papers.
 - Provided live and recorded interviews to the local and national news industry.
 - Provided a pre-publication review of a book on Canadian policing, now in publication.
5. On April 5, 2016 I visited the scene of this incident at 12534 S. 150 E., Draper, Utah as well as the residence of a witness to the event, Ms. Torrence, where I stood in a similar position to where Ms. Torrence indicated she was standing at the time of the interaction between Mr. Chatwin and members of the Draper Police Department.

6. At present, I am an instructor at the Ontario Police College (OPC) and have been so employed since 1996. While I am employed by the Ministry of Correctional Services and Community Safety, my time and comments associated to this review effort and testimony, if required, is and will remain independent of my employment with the Ministry. Similarly, I am also a Technical Advisor to the Force Science Institute as well as a facilitator and instructor on the Force Science Institute Certification Course, with experience facilitating classes relating to the investigation of police use of force in England, the U.S., and Canada. In particular, I have trained police officers in respect to human performance issues (e.g., reaction and response times) and limitations of human perception during rapidly unfolding, tense, uncertain events and the impact these factors might have on an investigation.
7. I am acutely aware that it will be the jury who determines precisely what occurred during this incident, including credibility issues. The comments provided within this report are not intended to usurp that role, but merely to assist the reader of this report to understand the information upon which I formulated my comments. I am also aware that I have a duty to assist these triers of fact by providing objective, impartial evidence.
8. My comments concerning visual issues in this case are not intended to question anyone's credibility, but rather simply to identify issues you may wish to explore during trial.
9. These comments remain dependent upon the information provided. Upon the disclosure of additional information, this report may be subject to revision.

Material Reviewed

10. In reviewing this event I was provided with and considered the following items:
 - a) Handwritten Statement of Kathy Torrence dated 1-18-2010 (Bates Stamp Chatwin270 – Chatwin 272 (3 pages).
 - b) Handwritten Statement of Kathy Torrence dated 1-18-2010 (Bates Stamp Chatwin274 (1 page).
 - c) Deposition of: Kathy Torrence taken November 19, 2015 – (123 pages).
 - d) Deposition of: Joshua Patterson taken December 7, 2015 – (196 pages).
 - e) Deposition of: Heather Baugh taken: December 9, 2015 – (87 pages).
 - f) Draper City Police Report dated 05/18/2010, Case #:2010-003060 – (28 pages).
11. On April 5, 2016, I travelled to the area of 12543 S. 150 East, Draper City, Utah in order to view the scene, take measurements, and assess the viewing position of a witness, Ms. Torrence, from the front room of her residence, located across the street and one residential lot to the south of the Chatwin residence.

Synopsis of Event

12. Based on my review of the material provided, my understanding of this event is as follows. On Tuesday, May 18, 2010 just before noon, Joshua Chatwin interacted with members of the Draper City Police Department in relation to a "DUI" (Driving Under the Influence) investigation. The police officer who initially contacted Mr. Chatwin has been identified as Draper City Police Officer Harris. The location of the interaction was in the driveway of the residence at 12534 S 150 E, Draper Utah.
13. During the interaction between Officer Harris and Mr. Chatwin, Draper City Police Officer Patterson and Animal Control Officer Baugh arrived at the scene.
14. During Mr. Chatwin's interaction with Officer Harris, Officer Patterson described Mr. Chatwin's demeanor as "becoming more and more agitated and aggressive" becoming "argumentative towards Officer Harris."
15. Officer Harris made field observations and conducted a field sobriety test whereupon he concluded that Mr. Chatwin had been operating a motor vehicle under the influence of an unlawful amount of alcohol, drug, or controlled substance or their metabolite, in violation of Utah law. Mr. Chatwin had also refused to provide a breath sample into a portable breath tester. Mr. Chatwin was arrested by Officer Harris at 11:56 hours and placed in handcuffs.
16. Officer Harris began to search and photograph the motor vehicle Mr. Chatwin had been driving. Officer Patterson had taken custody of Mr. Chatwin and was intending to search Mr. Chatwin incident to arrest for "weapons or contraband." Officer Patterson described in his police report how Mr. Chatwin "started to get agitated and pulling his arms away from me and trying to walk away." Officer Baugh noticed scratches on Mr. Chatwin's arms and asked Mr. Chatwin how he came to be scratched. Mr. Chatwin swore at Officer Baugh and asked to be left alone.
17. Due to Mr. Chatwin's continued movements, Officer Patterson decided to move Mr. Chatwin to a position next to Officer Harris' patrol vehicle, which was a pickup truck. Mr. Chatwin was turned to face essentially perpendicular to the side of the truck box behind the rear door of the truck cab. Officer Patterson said he had concerns over Mr. Chatwin's balance due to his apparent intoxication.
18. During this portion of the incident, Officer Patterson stated in his deposition he was slightly to the left of Mr. Chatwin's position. Officer Patterson says that Mr. Chatwin was grasping at his duty belt. He said he heard a click and looked down to see the retention feature of his pistol holster had been unlocked and Mr. Chatwin had part of his hand on Officer Patterson's firearm. Officer Patterson believed that Mr. Chatwin had defeated a retention feature on the duty holster.
19. Officer Patterson moved Mr. Chatwin towards his left with the intent of lying Mr. Chatwin on the ground in order to stabilize Mr. Chatwin and the situation by placing Mr. Chatwin in a

position of disadvantage. Mr. Chatwin suddenly ceased his resistance and suddenly went limp. The result was that Mr. Chatwin struck the ground and his head collided with the surface of the roadway/driveway.

20. Mr. Chatwin tried to get up while the officers tried to keep him on the ground. Ultimately, Mr. Chatwin was allowed to sit up, was leaned against the rear tire of a pickup truck, where paramedics offered medical assistance.
21. A witness watching the situation from across the street states that she did not see the resistance described by Officer Patterson nor Mr. Chatwin's hand on Officer Patterson's pistol or holster. Further, the witness characterized the handling of Mr. Chatwin as excessive in respect to how he was taken to the ground.
22. Based on the material provided and my understanding of this event, I offer the following comments for your consideration during the upcoming civil trial regarding this matter.

Police Training in Subject Control and Self-Defense

23. I appreciate that you have retained Mr. Ken Wallentine in respect to providing expert evidence on this topic. The inclusion of comments on this topic is not intended to take over his role in this matter. Rather, I would like to add a few comments based on my experience with such matters that may assist the court in integrating his information with mine.
24. My comments are based upon my experience as a police officer, which began in June 1979 and continued until 1995 as well as experience as a trainer, which began in 1983 and continues to the present. I have been employed full-time as a police trainer since 1996.
25. First of all, it might be helpful to consider that police officers are recruited from the general public. Police officers receive unique training in relation to specific authorities society empowers them with. What police training does not do is permit an officer to defy the laws of physics, act in a manner inconsistent with human constraints (Schmidt & Lee, 2014; Vickers, 2007) nor become impervious to the frailties of the human experience (Aharonian & Bornstein, 2008).
26. Within police training, periods of instruction involving the development of physical skills, associated academic knowledge, and often judgement in respect to self-defence, control of a resistive subject, and operation of a pistol are provided. With respect to the actual physical skills associated with what is broadly called "use of force" related training, each of the techniques are taught and practiced in a closed environment (Schmidt & Lee, 2014), which essentially means a 'classroom' environment. In the case of defensive tactics, gymnasiums or specific, purpose built facilities are created that may come equipped with padded floors and mirrors are used. For firearms training, firing ranges are required, as is the use of protective equipment such as hearing and eye protection. In fact, defensive tactics training also uses safety equipment. Trainees strike stuffed pads. If they strike another human being, padded

suits are worn by the 'aggressors' and padded batons and inert aerosol weapons (e.g., pepper spray) are used by the 'officer.' The officers being trained frequently attend defensive tactics wearing athletic clothing and footwear to avoid the cost of repairing or the need to replace damaged clothing and equipment.

27. Once the officers learn the skill set, efforts are made to put the trainees into reality based scenarios (Murray, 2004) in an effort to permit the officer to apply the skills learned 'in the classroom' during an encounter 'on the street.' In the seventies, this type of training, if it was done at all, used instructors playing the part of the subject while a trainee responded and the rest of the students watched. A debrief followed the event where an instructor pointed out where the student went wrong (failure in the scenario was almost a given) and what trainees needed to do in the future to be successful.
28. In the eighties and nineties, this type of training moved towards the use of electronics to accomplish similar goals. Officers will often refer to "FATS" training to describe this methodology.¹ Trainees interacted with pre-filmed and edited scenarios projected onto a screen. Using laser technology, sensors and computer software, the scenarios could be 'branched' to alter the events an officer was interacting with by either the system responding to the actions of the officers or by a trained system operator who could 'branch' the scenario and alter the behavior of the image on the screen. These systems are still in use today and have become very sophisticated in how they can interact with a trainee.
29. The next evolution of training was almost a return to what was being done in the seventies. By this time, scenarios used actors whom the trainees may be unfamiliar with. Trainers understood that defeating the trainee's efforts every time was counter-productive to the goal of building confidence which impacts competence. By now, officers were permitted to bring their duty belts, and uniforms for use during the scenario. Training pistols firing non-lethal training ammunition and inert pepper spray could be used by the officer. Padded batons are being replaced by plastic, expandable batons and it is possible for the actors to wear either large padded suits or thinner lightly padded protective gear under street clothes while interacting with the trainees. The goal has moved from defeating the trainee's efforts and pointing out deficiencies in their response to pushing them so that they are successful yet become aware of difficulties in responding to these types of events so that they might focus on how to improve.
30. The concept of stress inoculation training developed (Saunders, Driskell, Johnston, & Salas, 1996). If you search this term in the research based literature, it has become widely co-opted to address various issues. What this term means to a police 'use of force' instructor is that you expose (inoculate) the trainee to the types of events they will have to face on the street to get them familiar with using their training under the sorts of conditions they may face on the street. Scenario based training is part of a process by which stress inoculation training has been

¹ F.A.T.S. is an actual acronym for the Firearms Training System, produced by a company who provides police training equipment as well as pre-filmed and edited scenarios for use with their equipment.

incorporated into police training, particularly relating to defensive tactics, firearms, and officer safety related training.

31. The court should give thought to three factors virtually absent from the present public discourse regarding police use of force:
 - a. Training isn't the same as reality.
 - b. Without the subject's cooperation, police control efforts must exceed the subject's resistance.
 - c. Police officers are not only discouraged from using force in their duties; the actual frequency is very low.
 - d. Police training cannot provide a resolution to every type of encounter a police officer might face during their career.
 - e. Members of the public, unfamiliar with police procedures, training, or experience with a physical struggle while trying to take a person into custody, may not fully understand or could misinterpret what they experience.
32. In respect to training, one goal of training is to permit an officer the opportunity to try out their skill sets. Training provides an officer an opportunity to try their skill set so an officer can experience a success – a real life encounter will test that skill set in an effort to make it fail. In an actual street encounter involving a person who is substantially resisting police control efforts, it is highly likely that the person is doing whatever he or she can to defeat the officer's control effort. If police training were to follow the same principles, either the trainer offering the resistance or the trainee could be injured. Generally, occupational health and safety legislation precludes employers from creating an environment where the worker (trainee or trainer) is likely to be injured (e.g., during training events). For these reasons alone training cannot replicate the reality of a street encounter where an officer will face substantially resisting subjects bent on defeating the officer's control efforts and where the officer and the subject may be injured during the process. Consequently both the officer and subject may be experiencing an event they have never actually encountered before.
33. The second factor: unless the subject surrenders or submits to the officer's efforts and commands, the officer's force must exceed that of the subject or the officer cannot prevail – strength and size do not always go together. When adrenalin, due to emotional intensity, becomes involved during an encounter, measuring the amount of force used by the officer or anticipating the speed and intensity of resistance offered by the subject is very difficult. Consequently, officers who use substantial force at the outset of an encounter to overwhelm the subject's resistance may be seen as using excessive force. Officers who use insufficient force can be surprised by the subject's speed or strength and either become overwhelmed by the subject or have to catch up and surpass the efforts of the subject, exposing themselves to injury and loss of control of the situation. Insufficient force can also take on the appearance of excessive force.

34. The third point to consider is that while officers are trained in controlling resistive subjects, research reliably indicates that actual use of force is very rare (Baldwin, Hall, Bennell, Blaskovits, & Lawrence, 2016; C. Hall, 2013; C. A. Hall et al., 2013; International Association of Chiefs of Police, 2001), that there is an inverse relationship between frequency and severity of an encounter, (Butler & Hall, 2008) that is a police officer may take a firm grip on the arm of a person being arrested with some frequency while it is rare indeed that an officer fires their pistol at another person (Bazley, Mieczkowski, & Lersch, 2009; White, 2006). Police officers actually avoid using the very skills developed in training, a factor identified in the above noted research, which is contrary to the present perspective held out by the news industry. In the paper by Hall, et al, police use force at the rate of 0.014% of all contacts. In another study the following quote is found within the article's abstract:

“The results of the study indicate that approximately 70 per cent of the police officers sampled had been in a situation where they could have legally used their firearm but chose not to. Furthermore, police officers exercised restraint in deadly force in 93 per cent of the situations in which they could have legally fired their weapon” (Pinizzotto, Davis, Bohrer, & Infanti, 2012, p. 285).

35. The court should also be informed that police training cannot anticipate nor provide a resolution to every type of encounter a police officer might face during their career. Beyond the inability to provide a solution to every problem, there are times when resolving an acute problem must be undertaken without any opportunity to consider the outcome or consequences.
36. Given that police use of force is infrequent, many people will not have any direct experience in how police actually gain control of a resistive subject or why certain tactics might be used or risks and dangers recognized. The tactics and methods portrayed in the entertainment industry are often unrelated to what really occurs during a real-life encounter in a manner similar to how a court room crime drama accurately portrays a murder trial concluded within a single hour. Persons unfamiliar with the reality of police work may misinterpret the danger posed or the action taken by a police officer to try to gain or maintain control of a subject. For example, handcuffs alone do not prevent a police officer from being attacked, they merely limit the extent to which a subject can use his arms and hands. Based on the testing performed for this case, it is possible to disarm a police officer while remaining handcuffed. In my opinion, this would surprise many persons inexperienced with how some holsters are designed and the constraints handcuffs actually impose.
37. I respectfully suggest that what is being evaluated is not a street altercation between two civilians, but rather, an encounter between a police officer and a member of the public. Certain activities are common to police events (for example, arrests often lead to handcuffing and search which is done as much for the safety of the subject as for the officer's safety while many people equate handcuffs with prevention of escape only) and specific subtle events (for example, a “weapon check”, or holding one's arm in place against one's side while the other one swings freely while running = characteristics of an armed individual) can lead to a degradation of

a police officer's safety without such factors being recognized by a person unfamiliar with police tactics and procedures.

Positioning of the Parties



38. On visiting the site of the incident, the residence of Ms. Torrence is not directly across the street from Mr. Chatwin's residence nor his driveway. It is the first house to the south of a residence, which is opposite the Chatwin residence. Using the photograph within the provided material, particularly in "DRAPER-CHT-4764-4770," Ms. Torrence was standing in the front of her residence close to the north west corner of her home.
39. Upon entering the residence as arranged by counsel, Mr. Hamilton, I noted a video camera mounted to a tripod, positioned in the spot where I believe Ms. Torrence was standing. I also noted several other people inside the residence. I was not introduced to everyone present. During the time I was inside the residence, particularly while I was taking photographs, another man, with dark hair and wearing a blue coat was manipulating a camera with a telephoto lens. While I didn't see where or when he took his photos, he did have the camera positioned in front of his face in a manner consistent with taking photographs while I was inside the residence. I

noted that he was standing, at times, in a more northerly portion of the three windows at the front of Ms. Torrence's house and at times was standing more to the northeast of the tripod.

40. I also noted that according to the photos taken May 18, 2010 (DRAPER-CHT-4764-4770), of the three windows in front of the Torrence house, Ms. Torrence is standing before the right edge of the center window. The smaller front window to the north has a large evergreen-type tree blocking the view across the street towards the Chatwin residence. I checked the neighborhood using the publically available software program "Google Earth" prior to attending the site visit and upon returning. According to the web service, a ground level recording of the front of the residences in the area of the Chatwin and Torrence neighborhood was made in August 2014. This view shows a large evergreen-type tree at the northwest corner of the Torrence residence, similar to the size and shape of the tree blocking the view in item "DRAPER-CHT-4764-4770."
41. During the site visit, I noticed the evergreen-type tree is gone and the three windows in the room where Ms. Torrence had been standing provide a clear view. Consequently, if any photos or video recordings were taken of the testing performed during the site visit from this previously obstructed window, caution should be used in concluding what those photographs or video recordings would show in relation to a person standing in the location of Ms. Torrence at the center front window on May 18, 2010.
42. I did not speak to anyone inside other than briefly to Ms. Torrence, apologizing for the inconvenience the site visit might have caused her. At the time of writing this report, I have not been provided with any material collected on April 5 by anyone associated with the plaintiff or plaintiff's counsel.
43. While Mr. Chatwin was not outside his residence during my visit to the scene, I did have the opportunity to meet Mr. Chatwin's father. The elder Mr. Chatwin was kind enough to position a red Ford automobile, parked in the driveway at their residence, consistent with my requests. The red Ford was used as a surrogate vehicle to represent the white car Mr. Chatwin was driving on the day of the incident.
44. According to Heather Baugh's testimony provided during her deposition², when Mr. Chatwin was first placed in handcuffs he was standing on the grass in front of his residence with the driveway to his right.³ This was confirmed by Ms. Baugh during the site visit on April 5th, 2016. According to the transcript of her deposition, which contained confusion over which way Mr. Chatwin was facing while he was handcuffed, my understanding is that Mr. Hamilton stated for clarification, "Let the record reflect that she pointed east."⁴
45. Given the photographs provided on page 5 of "DRAPER-CHT-4764-4770," and the conclusion from Baugh that Mr. Chatwin was facing east once he had been handcuffed any view of the

² Deposition of Heather Baugh, dated December 9 2015

³ Deposition of Heather Baugh, dated December 9 2015, page 29.

⁴ Deposition of Heather Baugh, dated December 9 2015, page 29.

front of Officer Patterson from the location where Ms. Torrence would have been standing would be blocked by Mr. Chatwin's body.

46. Upon walking from the location where Mr. Chatwin was handcuffed toward the police truck parked in Mr. Chatwin's driveway, the view available to a person standing at Ms. Torrence's front window would have been a profile view of the officer and Mr. Chatwin. During a portion of this time, a person standing at Ms. Torrence's front window could have seen any existing gap between the officer and Mr. Chatwin. I cannot say to what extent a struggle might have been apparent given that both men were moving across the grass.
47. While visiting the site, I was informed that the same truck involved in this incident between Mr. Chatwin and Officer Patterson was available to be used. Mr. Hamilton provided the reference photographs used to position the truck in a location and orientation very similar to where the truck was at the time of the event on the understanding that the reference photographs provided the actual position and orientation of the truck at that time of Mr. Chatwin and Officer Patterson's interaction.
48. Given the information provided, it was not possible to re-position the truck precisely as it was on the day of the incident. Consequently, the decision was made to orient the truck to benefit the view of a person standing in the position of Ms. Torrence at the time of the incident. In other words, if the truck's alignment/orientation favored what could be seen from Ms. Torrence's front window in respect to the front of an officer's utility belt while positioned where Officer Patterson was said to be located, and the front of the belt could not be seen, additional testing would be unnecessary. If the favorable alignment/orientation provided a clear view, further testing would be required until the front of the utility belt was obscured or blocked.
49. The truck was positioned close to the actual location and orientation. Care was taken to align the rear bumper and side of the truck with the seams in the driveway and along the roadway in a close approximation of the location as indicated in the photos available for review. The result was that the front left corner of the truck was positioned approximately in the same location, certainly well within an estimated 1 foot of its actual location.
50. The truck was purposefully aligned in a more perpendicular orientation (east-west) within the Chatwin driveway than it appeared in the photos taken on the day of the incident. This orientation was chosen to enhance the ability of a person standing at the front window of Ms. Torrence's residence, where she was photographed as standing, in respect to the opportunity to see between a police officer and a handcuffed person being searched or controlled by a police officer standing to the subject's rear.
51. The distance from the front of the window glass to the point directly behind the box where Mr. Chatwin was described as being placed was measured and found to be 105 feet 9 inches. A video camera had been placed in the approximate location of where MS. Torrence had been standing, according to the photos made available for review. Placement of this camera was

done prior to my entry into the residence. The outermost lens of the camera was 1 foot behind the glass of the front window. The camera viewfinder was located about 5 inches further back. Ms. Torrence was not asked any questions concerning the event or interaction involving Mr. Chatwin and Officer Patterson.

52. Uniformed members of the Draper City Police Department were present during my site visit, including Ms. Heather Baugh. I asked a male officer, who was over 6 foot in height, to stand in a position where I understood Officer Patterson to have stood and at a distance consistent with controlling and searching a handcuffed person.
53. Given the distance determined during the site visit between the relative position of the uniformed officer used for testing and a person standing in the position of Ms. Torrence, as well as my experience as a police officer and police trainer using handcuffs, searching, and controlling a subject, it is my opinion that view of a person standing in the position of Ms. Torrence could not see the front of the officer, nor the front of his utility belt. Photographs labelled "CIMG4825 to CIMG4827" show the results of this test. The hands of the officer, which are being held against his front waist area, are not visible. The photos taken were captured from a position directly over the video camera mounted on the tripod, located in the front room of Ms. Torrence residence.
54. Consideration should be given to the significance of the position Officer Patterson said he had adopted while trying to hold Mr. Chatwin against the side of the truck:

9 A. *"A little of both, probably. Turned him.*

10 *Grabbed what I could -- I was already grabbing the right*

11 *side, because he was going to fall down the driveway.*

12 *You know, still against the truck, but he was still*

13 *going to fall. So I'm already turned to the side,*

14 *because the driveway is at an angle, so to keep him up."*⁵

55. Given this information and the fact that the driveway slopes toward the street, if Officer Patterson was turned to the east, this would have potentially increased the ability of a person standing in Ms. Torrence's front window to see the front of the officer's utility belt. It would, however, also have made it more difficult for Officer Patterson to hold Mr. Chatwin upright, which he was trying to do. Ms. Torrence never mentioned or recalled this orientation in her deposition evidence.
56. If, however, Officer Patterson turned more westerly, as I believe and officer would turn to ensure his effort to hold Mr. Chatwin from falling, this westerly turn would put Patterson in a

⁵ Deposition of Officer Patterson, dated December 7, 2015, page 102.

position to use the grade of the driveway to assist him in his effort to hold Mr. Chatwin upright. At the same time, Officer Patterson's back would be more directly toward a person standing in Ms. Torrence's front window. This type of turn would also assist a handcuffed person in reaching the front of the officer's utility belt, including the holster without a person standing in the location of Ms. Torrence seeing this activity.

57. Similarly, the ability to detect muscular tension, which can be a form of resistance, could be absent to a witness standing in the location of Ms. Torrence particularly on the left side of the subject, which would have been farthest away from a person in Ms. Torrence's location. Add Officer Patterson's described turn to support Mr. Chatwin and Officer Patterson's back would be turned eastward.

58. Ms. Torrence also said that Mr. Chatwin looked to his right prior to Officer Patterson taking him to the ground:

Q. *"Just standing right behind him. And at some point you say that this officer threw him to the ground. That's what you said. What happens right up until that point?"*

A. *Josh was handcuffed, looking to his right. And from what I can see, it looks like he says something, and then the officer grabbed him and threw him to the ground.*

Q. *So he turns his head?*

A. *Yes, head's turned.*

Q. *And you see his lips moving?*

A. *Yes."*⁶

59. This description, the circumstances of this case, the relationship and positioning of Officer Patterson in respect to Mr. Chatwin, the security of the officer's holster, the fact that the officer moved Mr. Chatwin, according to Ms. Torrence in a counter-clockwise direction all fit with Officer Patterson facing away from Ms. Torrence.

Q. *"Okay. So, which side of the officer does he move Josh -- Mr. Chatwin towards? Is the officer moving Mr. Chatwin towards your house, or towards Mr. Chatwin's house?"*

A. *Counter-clockwise.*

⁶ Deposition of Kathy Torrence, dated: November 19, 2015, page 30.

Q. *Counter-clockwise. So towards Mr. Chatwin's house?*

A. *Correct.*⁷

60. The activity described by Ms. Torrence would turn Officer Patterson's back toward a person standing at Ms. Torrence's front window.

Holster Testing

61. While I was not provided with the actual holster worn by Officer Patterson, its configuration was described by Patterson during his deposition:

15 *"Q. How do you unlock it?*

16 *A. You just push straight down on the thumb*

17 *break, and it rolls forward. So it's a loop.*

18 *Q. Okay.*

19 *A. It's a loop with a little area for -- so you*

20 *push down, and it rolls forward."*⁸

62. The holster design that Officer Patterson was describing is consistent with a holster I use for training police officers. The pistol sits in a molded plastic envelope designed to conform to the firearm intended to be secured. A spring-loaded piston is connected to a loop that covers the back of the weapon above the tang of the pistol. The holster is designed such that two steps are required to permit the weapon to be drawn without encumbrance.⁹ For the purposes of officer and public safety, I will not describe in this report how a pistol can be successfully removed from one of these holsters by a person other than the officer. The method can be demonstrated, based on my testing, while handcuffed to the rear as Mr. Chatwin was.

63. Further, the movement of the loop forward, consistent with Officer Patterson's description, can be accomplished very quickly and results in an audible click. In my opinion, the movement that results in a breach of the holster security could result from a simple, unsophisticated effort, and could occur quickly to the extent a person unfamiliar with this holster would not recognize the activity for what it actually was.

⁷ Deposition of Kathy Torrence, dated: November 19, 2015, page 31.

⁸ Deposition of Officer Patterson, dated December 7, 2015, page 96.

⁹ See photographs labelled CIMG4839 - CIMG4846.

64. Based on the testing of the security of the holster design, including while handcuffed behind my back and the results achieved, a prudent officer seeing that the security of their pistol was at risk would take action to ensure their own safety.
65. In respect to a person standing approximately 105 feet away from a police officer who has a subject in handcuffs to the front of the officer, it could appear to a person unfamiliar with this holster that a subject in custody does not have his hands on the holster proper when in fact the subject's hands are in contact with the holster. The black retention loop against the black background of the police uniform would result in the loop being less conspicuous due to lack of contrast which considers how well an object stands out from its background.
66. Similarly, a subject might be touching the pistol in the manner described by Officer Patterson¹⁰ and a person standing 105 feet away, particularly someone unfamiliar with police holsters, could be unaware of the significance of the subject's hand position and location. The belief that the subject never touched the holster, nor the pistol could result.

Perception

67. It has been said that we look with our eyes yet we see with our brains (Krause, 2015; National Eye Institute, n.d.; Olson, Dewar, & Farber, 2010). Events we see and experience are based on a variety of influences, for example, the context of the circumstances (Smith & Muckl, 2010), our experience, and expectations. *"The viewer draws on memory, inference and other psychological processes in order to make sense of what he sees"* (Green, Allen, Abrams, & Weintraub, 2008, p.3).

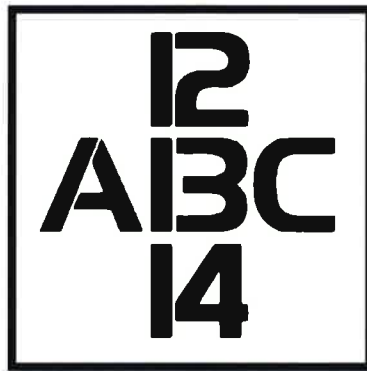


Figure 1.

68. An example is demonstrated in figure 1. Whether the center character is interpreted as a capital 'B' or as the number '13' depends on the context understood by the viewer.

¹⁰ Deposition of Officer Patterson, dated December 7, 2015, pages 98.



Figure 2.



Figure 3

69. The experience of the viewer will determine how they interpret Figure 2. Individuals from outside of North America may interpret this graphic differently compared to people who recognize this photo for what it is, a baseball player throwing a baseball. Indeed, baseball experts should be able to determine that this photo represents a right handed pitcher, throwing a baseball from a raised pitcher's mound. The photograph would have to be taken from the first base side of the infield due to the direction of the number scripted on the rear of the player. Baseball jersey's generally have large numbers on the back rather than the front. Further, if the white markings above the pitcher's left shoe are noticed, a reasonable inference that might be drawn is that the player standing in the background would likely be the third basemen. These factors become obvious when the unobscured version of the photograph is considered (Figure 3).



Figure 4



Figure 5

70. A person's experience may help or hinder them from interpreting and comparing figures 4 and 3. Both of these photographs represent a mask worn by a sports participant. Both masks are intended to protect the wearer from injury should they be struck by the object propelled quickly and suddenly during their associated games. Without the necessary experience, the perception of the viewer might be that these two items are the same and could be used interchangeably. While arguably the mask on the left could be used to play both sports, the red mask could not be used safely to play the sport the green mask is designed for – hockey, and worn by a hockey goalie. The red mask is designed to be worn by a baseball catcher. While a nine inch

circumference, 5 ounce baseball will not fit within the openings of a goalie mask, a one inch thick, three inch diameter, 6 ounce hockey puck will certainly pass through the opening at the catcher's eye level offering no protection from the smaller, flatter puck.

71. This consideration, in my opinion, might assist the court in understanding the observations made by Ms. Torrence when she witnessed Mr. Chatwin being taken to the ground and the explanation provided by Officer Patterson in describing the events as he perceived them. Each has their own interpretation based on context of the circumstances, their individual experience, and expectations, particularly as they compare to each other.
72. In the case of Ms. Torrence, she was unaware of anything Mr. Chatwin was saying¹¹ while Officer Patterson heard Mr. Chatwin swearing, indicating his displeasure. Officer Patterson said he could also feel the subject physically resist.¹² Resistance can be felt by one person holding another without the resistive behavior being obvious or even apparent to a person looking on, particularly one standing across the street, 105 feet away. Consequently, the difference in what Ms. Baugh could see and hear, what Officer Patterson was hearing and feeling should be compared to the experience of Ms. Torrence standing inside her residence and across the street. The context of the event as understood by Officer Patterson and Ms. Torrence would, in my opinion, be different. In addition, the difference in familiarity with police equipment between Ms. Torrence and Officer Patterson would also assist in understanding the difference in perception of this event.
73. In respect to experience, Ms. Torrence said that she could not recall ever seeing someone arrested before.¹³ Any experience she did have in relation to seeing a person in handcuffs is associated with a person while being escorted on an airplane. That being the case, it is my experience that individuals transported on an aircraft are handcuffed to their front rather than to their back, in the manner Mr. Chatwin was handcuffed. Prisoners expected to either cause problems during transport or pose a danger to the aircraft or passengers do not travel on commercial airlines. Ms. Torrence should be canvassed for her experience with unruly or resistive persons transported on an aircraft. It may be that she has no experience with a resistive subject wearing handcuffs. A police officer, on the other hand, uses handcuffs on a frequent and recurring basis. Police officers also have experience dealing with difficult intoxicated people. To that extent, Officer Patterson said he moved Mr. Chatwin from one area of the driveway to a position where he could use the side of the pickup truck to prevent Mr. Chatwin from falling.¹⁴
74. Consideration should also be given to the common belief that a person who is in handcuffs is unable to resist. In fact, handcuffs merely limit the subject's arm movements. People can still

¹¹ Deposition of Kathy Torrence, dated: November 19, 2015, page 19.

¹² Deposition of Officer Patterson, dated December 7, 2015, pages 89, 91, and 92.

¹³ Deposition of Kathy Torrence, dated: November 19, 2015, page 44.

¹⁴ Deposition of Officer Patterson, dated December 7, 2015, page 94.

kick, use their knees, elbows, head, and bite during a struggle. If a subject can access a knife or pistol, these weapons can also be used by a person handcuffed behind their back.

75. Having visited the scene, measured the distance, and testing for orientation of the officer and its relationship to what is visible to a person standing in Ms. Torrence's front room and comparing these observations to the photos provided for review, my opinion in respect to a person standing in Ms. Torrence's front window is that the front of Officer Patterson could not be seen, given the physical orientation of the truck and the fact that Mr. Chatwin was said to be leaning against it. Mr. Chatwin would have been squared up to the side of the vehicle and Officer Patterson was behind him. Ms. Torrence said she could see between the officer and Mr. Chatwin. If Officer Patterson was oriented similar to the position of Mr. Chatwin, a person standing in the position of Ms. Torrence could not see the front of Officer Patterson. At no time did Ms. Torrence say Officer Patterson was partially turned toward her viewing position.
76. Secondly, while she may have seen Officer Patterson and Mr. Chatwin from the side, in my opinion, her view is unlikely to have been perpendicular to the two men except as the two men walked toward the side of the pickup truck.
77. Returning to the experience of Ms. Torrence, it would be helpful to explore her familiarity with actual physical altercations. She said that she could not recall seeing an arrest being made by a police officer. Consequently, it is likely that she also has no experience with a physical altercation between a handcuffed subject and a police officer. Ms. Torrence may not recognize Mr. Chatwin's actions in the same way Officer Patterson would.
78. Similarly, Officer Patterson is standing close to Mr. Chatwin and is controlling Mr. Chatwin's arms and hands. If Mr. Chatwin were to lean backwards – "straight back" was the term put to Officer Patterson by plaintiff counsel¹⁵, such movement might cause Officer Patterson to interpret Mr. Chatwin's movement as an attempted headbutt when the potential collision was not necessarily intentional on the part of Mr. Chatwin. I understand Officer Patterson to have said a headbutt nearly occurred rather than did in fact take place. It may be helpful to the court to provide the fact that:

"Headbutts do not have to be performed with the forehead. Especially in defensive situations, the side of the head or the occipital area can be used as a striking instrument. Blows with the back of the head can be potentially more dangerous than the typical headbutt since the occipital bone is very firm and the head/neck extensors very strong (stronger than the flexors" (Adamec et al., 2013, p.109).

¹⁵ Deposition of Officer Patterson, dated December 7, 2015, page 101

79. The duration of an ‘unexpected’¹⁶ headbutt requires between 0.19 – 0.21 seconds (Adamec et al., 2013), a timeframe which is within the time of an eye blink, which occurs in .130 -.300 seconds (International Organization for Standardization, 2014; Liversedge, Gilchrist, & Everling, 2011). Even headbutts involving ‘full windups’ can be delivered in less than a second.
80. In conjunction with these observations, consideration should also be given to the circumstances as described by Officer Patterson and his attempt to explain what happened immediately prior to Mr. Chatwin going to the ground. Officer Patterson said that he believed Mr. Chatwin might fall down the driveway. When Officer Patterson heard the retention feature on his holster release, Officer Patterson said he looked down at his holster. When he looked up he believed or perceived Mr. Chatwin’s head coming straight back. Consequently, Officer Patterson ducked down so he would not be struck by Mr. Chatwin’s head.¹⁷
81. Officer Patterson said he moved Mr. Chatwin “down and away” from the side where he carries his pistol. It was at this point that Mr. Chatwin went to the ground, in my opinion, faster than Officer Patterson intended. Given Officer Patterson’s experience with Mr. Chatwin’s resistance in conjunction with the fact that if an officer is going to move a resistive person, a police officer must use greater effort than the subject to successfully move him or her. If a subject suddenly and unexpectedly stopped his resistance, the result can be a more rapid movement than a police officer originally intended. It may be a simple timing issue that caused Ms. Torrence to perceive that Officer Patterson threw Mr. Chatwin to the ground. This consideration comports with Officer Patterson’s commentary that he did not believe that Mr. Chatwin collapsed. My opinion is that Officer Patterson simply had difficulty explaining what occurred because the outcome was unintended. He intended to place Mr. Chatwin on the ground due to his resistance. Mr. Chatwin did in fact go to the ground; however, it was much more rapid than Officer Patterson planned. Ms. Torrence’s context of the event was dissimilar to that of Officer Patterson. As a result, she is reporting what she perceived.

Human Visual Considerations in Respect to This Incident

82. As one looks at a scene, the individual’s gaze alternates between periods of stability (fixations) and periods when the gaze moves rapidly between objects and locations. When a person’s gaze is maintained on objects or locations for a period sufficient for information to be processed by the brain [estimates range from a minimum threshold¹⁸ of 0.1 seconds¹⁹ to about 2 seconds

¹⁶ The term unexpected was used to identify that the person delivering the headbutt did so without any appearance of any backswing of the head.

¹⁷ Deposition of Officer Patterson, dated December 7, 2015, page 102

¹⁸ Threshold is used to identify a stimulus condition that can just barely be perceived (Olson et al., 2010, p. 21).

¹⁹ 0.1 seconds for a fixation is a timeframe often used in laboratory settings. Within ISO 15007-1:2014, section 4.1.6 – minimum glance duration: “Fixations to an area of interest < 120 ms (ms = milliseconds or .12 seconds) are physically not possible” (International Organization for Standardization, 2014).

(Liversedge et al., 2011)]²⁰, the term used to describe this event is known as a fixation. Fixations can last up to 2 seconds (International Organization for Standardization, 2014). This fixation of gaze must be held on an object or location within 3 degrees of visual angle (Vickers, 2007). To get an idea of how much space is represented by 3 degrees, one can hold a fist at arm's length, raise their thumb upwards, close one eye and the area blocked by their thumbnail represents approximately 3 degrees (Boff, Kaufman, & Thomas, 1986 -b; Green et al., 2008; Harris Sr. & Harris II., 2009; Liversedge et al., 2011; Vickers, 2007).²¹ Visual acuity declines steeply from the fovea to the retinal periphery.

83. A person's eyes rarely remain unmoving when viewing a scene, situation, or event, even when staring. Quick, sudden eye movements, known as saccades are used to scan a location or object of interest. For example, when looking from face to face in a photograph, the movement used to do so is termed a saccade. Humans average about 3 saccades each when viewing a relatively stable scene. Each saccade ranges in duration from .06-.1 second. In order for a human to see and comprehend a scene or event, our eyes must move rapidly from one location or object to another. It is through the use of saccades, fixations, pursuit tracking that we make sense of the world by aligning the viewer's line of gaze with the fovea of the eye, which permits the maximum visual acuity to be brought to the item or scene of interest.

84. What many people are unaware of is that during a saccade the brain actively works to suppress information and movement that can be occurring within our visual field. This feature of our visual system prevents us from experiencing blurred images when we move our eyes. One other feature of our visual system associated with saccades is that we may not notice a new object or brief event that appears during a saccade. "Vision is actively suppressed in the period of time around the generation of a saccade" (Gilchrist, 2011, p. 92.)

85. Information obtained or gained during a fixation or while tracking an object or person is maintained in our short term memory permitting us to experience scenes and events that are cohesive and meaningful (Leigh & Zee, 2006). This is how memory, interpretation, context, and expectations influence what we 'see.' It is also why it is accurate to conclude that while we look with our eyes, we see with our brains.

86. A simple explanation of limits associated with seeing clearly is as follows:

"The human field of view is fairly large, about 180 degrees from side to side and slightly less from top to bottom but the ability to discern detail is not uniformly distributed throughout this field. To see an object in detail it must be focused on a very small central portion of the retina, the fovea. This tiny area, densely packed with cone

²⁰ "Average fixation during scene viewing is about 300 ms, but there is significant variability around this mean both within an individual viewer and across individuals" p.600). "The duration of fixations typically varies between 200 and 600 ms, for example when scanning one's environment; however, this duration can be voluntarily extended" (Krause, 2015, p. 47).

²¹ Some sources range the area the thumbnail covers from as little as 1 degree to no more than 3 degrees.

cells translates into a visual arc in our field of vision which is only about 2 to 3 degrees across, perhaps the size of a quarter dollar coin held at arm's length. Here our vision is most acute and we can see objects in color and great detail. As a target is focused farther away from this central region, the amount of detail drops off rapidly as the transition from rods to cones progresses. At an angle of only 10 degrees away from the fovea, the acuity of an image drops off by 50% and at an angle of about 25 degrees, acuity is only about 10% when compared to focal acuity. This rapid loss of detail in the periphery means that to see an object clearly we must look directly at it. For this reason the human eyes are constantly in motion, scanning back and forth, up and down, so that different parts of the field of view can be sampled in detail" (Robins, 2009, p.13)

87. Harris' book on Forensic Vision states:

"For an individual with 20/20 vision, visual acuity 10 degrees of axis (approximately the width of a hand held at arm's length) will be on the order of 20/100. At 20 degrees of axis visual acuity will drop to something on the order of 20/200, which happens to be the definition of legally blind. Therefore, while our peripheral vision is very valuable, it is no substitute for the central fovea when it comes to seeing detail" (Harris Sr. & Harris II., 2009, p.7).

88. In respect to visual angles, if one uses a clock analogy, 12 o'clock would represent the angle of zero, the 9 o'clock position would represent 90 degrees to the left, while the 3 o'clock position would represent 90 degrees to the right of the viewer. The 11 o'clock position would represent 30 degrees of visual angle to the left and similarly, 30 degrees of visual angle to the right would find the 1 o'clock position.

89. People generally view what's in front of them and will shift or saccade their eyes to 15 degrees to either side of centre without moving their head. The eye and head angle will rarely exceed 35 degrees (Department of Defense, 2012; Dewar & Olson, 2007).

90. Given the data collected at the site visit, it is possible to make certain estimates.

- The red Ford motor vehicle currently driven by Mr. Chatwin's father was placed in a position on the Chatwin driveway similar to the location of the white car Mr. Chatwin was driving at the time.
- A Draper City police officer, wearing plain clothes, was positioned in the relative position Ms. Baugh recalled Mr. Chatwin standing while on the lawn at his residence.
- Ms. Baugh stood where she recalled standing while Officer Patterson interacted with Mr. Chatwin at the side of the truck.
- The space between the box and the cab of the pickup was used as the position of Officer Patterson and Mr. Chatwin while standing at the side of the truck.

91. Given the location of the truck, and the location of the car, I estimate that the visual angle between these two locations is about 6 degrees. A person standing in the location of Ms. Torrence would have to shift her eyes from the area where Officer Patterson was standing to clearly see Officer Harris at the driver's door area of the car Mr. Chatwin had been driving to fixate the image on her fovea (1-3 degrees) while head movement is unnecessary.
92. A person standing in the position of Ms. Torrence could look at all four locations without moving their head, however, glancing from the truck back to the driver's side door of the car Mr. Chatwin had been driving, approximately 30 feet farther west, would require the eye to accommodate (refocus) to see what was occurring clearly. The time required to refocus the human eye does not occur instantly.

"The time course of accommodation has been determined by measurement on normal young adults (Campbell & Westheimer, 1960). The reaction time for a response to a visual stimulus is of the order of 0.3 sec and the movement is essentially complete approximately 0.9 seconds after the stimulus onset [see Fig. 4.11]" (Boff, Kaufman, & Thomas, 1986 -a, p.4-6).

During this time frame (0.3 to 0.9 seconds), based on my testing of the type of holster used by Officer Patterson, it is possible for the retention hood of the holster to be unlocked and moved forward. It is also possible to touch the back of the pistol, as described by Officer Patterson, within this same period.

Focus of Attention

93. Police officers, like all human beings are not able to take in every bit of information within their environment (Kahneman, 2011; Schmidt & Lee, 2014; Vickers, 2007). The fact that light waves enter the eye and those light waves may even stimulate the retinal lining of the eye, that doesn't mean an individual sees everything their face is pointed towards or even within their field of vision (Green et al., 2008; Mack & Rock, 1998). The best example of this phenomenon is demonstrated in a video made for a study that examined how much we see and how much we miss. Participants were asked to watch a video of two groups of people, one group dressed in black shirts and the other in white shirts. Each group was passing a basketball to other person in their group as they moved randomly around the screen. Some research subjects were asked to count the number of times the white team passed the basketball. Others were asked to count the number of times the white team bounce-passed the ball and the numbers of times the ball was passed without hitting the ground. During the video, a person wearing a black gorilla suit walked into view, stood in the middle of the group, pounded its chest, turned and walked off. What the researcher's discovered was the more a person was involved in attending to other aspects of the event (keeping track of the number of bounced passes and the number of passes through the air) the less-likely they were to notice the gorilla (Simons & Chabris, 1999). Of course, knowing about the gorilla, and watching the video often results in people not believing this phenomenon to actually occur.

94. Research points to the fact that the more focused one becomes on an aspect of an event, other factors occurring in plain sight, yet not included within their viewers attentional focus, can be overlooked or missed. In the research mentioned above, the subject's counting the number of times a ball was passed through the air compared to the number of times the white team bounced-passed the ball caused the focus of attention to be narrowed to a point where movement associated with a team wearing another color were ignored. Given the 'gorilla' was not dressed in the color of the team being watched closely, the presence of the information is not considered.
95. When someone intently focuses on an aspect of an event, their visual field can narrow substantially. The concept is known by several names, for example, focus of attention (Schmidt & Lee, 2014; Vickers, 2007), and tunnel vision (Artwohl & Christensen, 1997; Godnig, 2003; Grossman & Christensen, 2004; Harris Sr. & Harris II., 2009; Sharps, 2009; Siddle, 1995). This phenomenon is also known as perceptual narrowing or perceptual distortion (Klinger & Brunson, 2009). The phenomenon isn't unique to police officers (Godnig, 2003), however it is frequently associated with stressful events. If, however, one merely reflects on their own experience, for example, while watching television, there are occasions when the viewing screen fills one's visual field despite the fact that objects nearby are available for their attention. In respect to other everyday occurrences, it is estimated that when a driver is operating a motor vehicle along a roadway at 30 miles per hour, targets can be seen in a visual field of 150 degrees. At speeds approximately 60 miles an hour, the driver's visual field will drop by half (Krause, 2015; Olson et al., 2010). Consequently, looking at an event does not ensure that every aspect of the event will be noticed or even seen (Green et al., 2008; Kahneman, 2011; Robins, 2009; Schmidt & Lee, 2014; Schmidt & Wrisberg, 2000; Simons & Chabris, 1999; Vickers, 2007).
96. Ms. Torrence in her recall of the incident was aware of the location of Officer Harris, who was moving between Mr. Chatwin's car and the pickup truck, as well as the whereabouts of Officer Baugh, described as standing somewhere in between.
97. Ms. Torrence also recalls, as stated earlier in this report, that just prior to the takedown, Mr. Chatwin turned and began to speak to Officer Patterson. While MS. Torrence could not hear or make out what Mr. Chatwin was saying, she said she could see his lips move.²² Consequently, while focusing attentively on such a narrow aspect of the event, a human being is unlikely to simultaneously narrowly focus on the narrow black retention strap above the officer's pistol. As stated previously, this strap can be moved very quickly and may be a movement unlikely to be recognized for what it was, particularly at over 100 feet away, when occurring in front of a person unfamiliar with police equipment.
98. Given the photographs provided for review, the dimensions of the street and the driveways, a person watching this incident would generally scan the scene, shifting their focus of attention from one person to the next in order to make sense of what is occurring. In other words, a

²² Deposition of Kathy Torrence, dated: November 19, 2015, page 30.

person watching this type of event would generally look and account for one individual or activity, shift to their gaze and attention, and return or go on to another area of interest.

99. At each fixation, which is the time when a person's gaze is stable upon a scene, the subject would interpret what they are watching, and this fixation requires a period of time. According to the text by Dewar and Olson:

"Standardized terms for glance behavior in automotive contexts are defined in SAE (Society of Automotive Engineers, 2000) and ISO International Standards Organization, 2002) publications. A fixation, the basic element of looking behavior, occurs when the gaze is directed towards a particular location and remains there for some period of time, typically around 0.20-0.35 seconds" (2007, p. 57).

100. As stated, the ISO has revised their fixation timeframes as of 2014 to include periods up to 2 seconds.²³
101. Admittedly, looking from one person to another in a driveway across the street can be accomplished within a single second. In comparison, as previously described, a headbutt can be delivered within the same timeframe²⁴ and be missed by an observer who may be looking elsewhere particularly if the viewer has little or no experience in seeing what a headbutt looks like. Secondly, Officer Patterson never claimed that Mr. Chatwin actually struck him. Rather, Officer Patterson, like Ms. Torrence, is interpreting the actions he observed in a manner he understands and consistent with the context of the event, again, as he understood it.
102. Similarly, reaching back and rolling the retention feature on the holster design described by Officer Patterson could take only a portion of a second. The activity could occur rapidly to the extent it gets missed when only visual information is available. Moving the retention loop forward quickly results in an audible click, at least within a quite setting.
103. Ms. Torrence was attempting to pay close attention to the events across the street. As indicated earlier in her deposition, just prior to Mr. Chatwin being taken to the ground, her attention was focused on Mr. Chatwin's face to the extent that she could see that his lips were moving. That being the case, it is unlikely that Ms. Torrence can also be paying close attention to Officer Patterson's holster, in particular to the one inch wide, two inch high black colored retention loop over the back of Officer Patterson's pistol, viewed from over 100 feet away.

Conclusion

104. Given:

²³ The Society of Automotive Engineers is said to be updating their information, however, as of April 9, 2016, the update is not available for purchase (<http://standards.sae.org/wip/j2396/>).

²⁴ Officer Patterson was never headbutted by Mr. Chatwin, rather, Officer Patterson perceived Mr. Chatwin's head move towards him in a manner consistent with a headbutt.

- The material provided for review as listed in this report,
- a visit to the scene,
- measurements made at the scene,
- the opportunity to stand in the location purported to be where Ms. Torrence stood while viewing this incident,
- the alignment of the motor vehicles as placed and the position of a witness standing in the front of Ms. Torrence's residence,
- testing a holster designed consistent to the one described by Officer Patterson and,
- completing such holster retention testing with handcuffs on while my hands were behind my back,
- consideration of the inter-related factors outlined in this report,

it is my opinion that the version of events provided by Officer Patterson and Ms. Baugh are more than possible and are consistent with and supported by the tests conducted and empirical data cited.

105. It is also my opinion Ms. Torrence is providing her assessment of what she believed occurred and has provided this information to the best of her recollection.
106. In sum, it is my opinion that Officer Patterson responded to a breach of his personal safety, a retention feature on his duty holster had been disengaged by Mr. Chatwin, by quickly taking Mr. Chatwin to the ground. In doing so, this potentially serious breach of Officer Patterson's safety as well as the safety of Officer Harris and Ms. Baugh can be overcome. While Officer Patterson intended to take Mr. Chatwin to the ground to establish control and ensure Officer Patterson's safety and that of the other officers, the unfortunate collision Mr. Chatwin had with the ground was an unintended outcome.
107. I trust this report assists in explaining the reasons for the opinion provided. Should you require clarification or have any questions, please advise and efforts will be made to address them.
108. It is respectfully requested that an opportunity be afforded to revisit the stated positions and opinions upon the production of additional information relating to this case.

Exhibits

109. I may use the following additional exhibits to explain my opinions:
- Photos taken during site visit on April 5, 2016
 - Other photos taken of exterior front side of Torrence residence prior to April 11, 2016.

- Automatic Locking System duty holster and inert training pistol.
- Handcuffs meeting NIJ Standard for Metallic Handcuffs, NIJ Standard 0307.1, (1982).

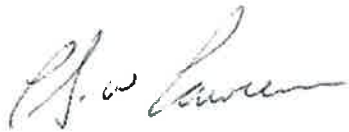
Testimony in Last Four Years

110. See attached curriculum vitae.

Compensation

111. See attached fee schedule

Regards
Elgin Security Consultants Inc.
President
Chris Lawrence



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10' 9" to pos'n
+ 1 5" to view fence
1 foot to front of house

Measurements – 12534 S. 150 E. Draper, UT

April 5, 2016

Item	Description	Result
a.	Determine how far back from the window Ms. Torrence was standing during her observations	
b.	N/E corner of Torrence residence, straight across to front edge of pillar on east side of the road.	P
c.	Width of roadway, measured west to east.	
d.	From west side of the street to eaves trough of Chatwin residence.	
e.	Width of Torrence driveway along west side of gutters.	
f.	Width of sidewalk in front of Torrence residence.	
g.	Width of sidewalk in front of Chatwin residence.	P
h.	From Torrence front window to center of Chatwin driveway on west side of gutter where it meets the roadway in front of Chatwin residence (along the red line).	
i.	From Torrence front window to center of Chatwin driveway on west side of sidewalk.	
j.	From Torrence front window to center of Chatwin garage at eaves trough.	48' 32" → 48' 34"
k.	Width of Chatwin driveway where it meets the gutter on east side of the roadway.	P
l.	Width of Chatwin driveway where it meets the E/S sidewalk in front of residence.	
m.	Distance between N/N of Chatwin Driveway and S/S of northern neighbor driveway where it meets the grass on eastside of the gutter.	P
n.	Width of northern neighbor's driveway where it meets the grass on eastside of the gutter.	
o.	Distance from Torrence residence (pos'n where witness standing) to the south corner of the northern neighbor's driveway.	
p.	Distance from Torrence residence (pos'n where witness standing) to the N/W corner of northern neighbor's garage.	

27 feet
5 inches
along driveway
to roadway

from corner of house
to 5' 6" corner

31 feet 6" from house's front w/ 1/4"

7' 3" from sea of shrub to ditch in gutter

Google Maps S 150 E

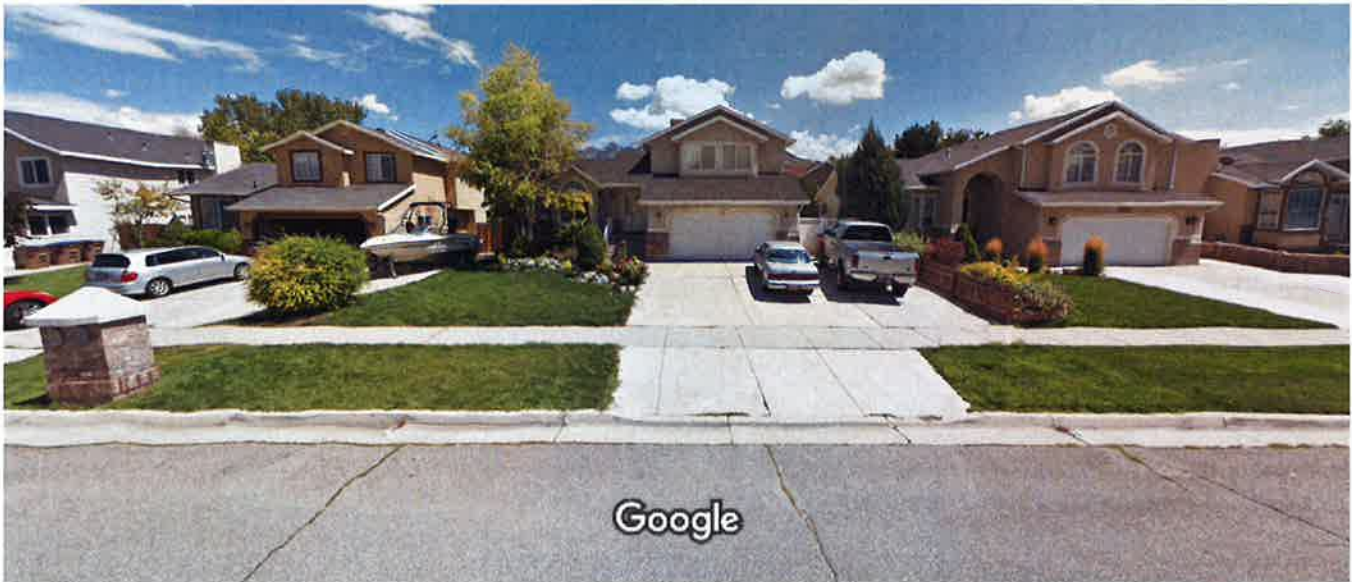
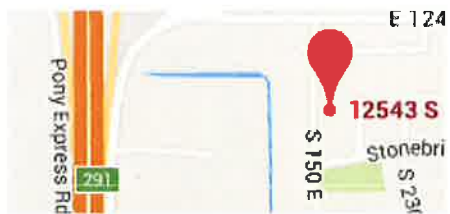


Image capture: Aug 2014 © 2016 Google

Draper, Utah

Street View - Aug 2014



Google Maps

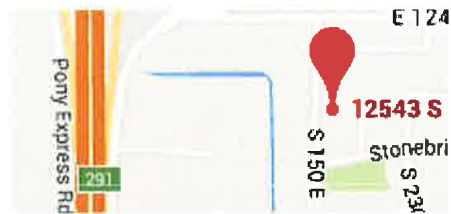
Google Maps S 150 E



Image capture: Aug 2014 © 2016 Google

Draper, Utah

Street View - Aug 2014



Google Maps

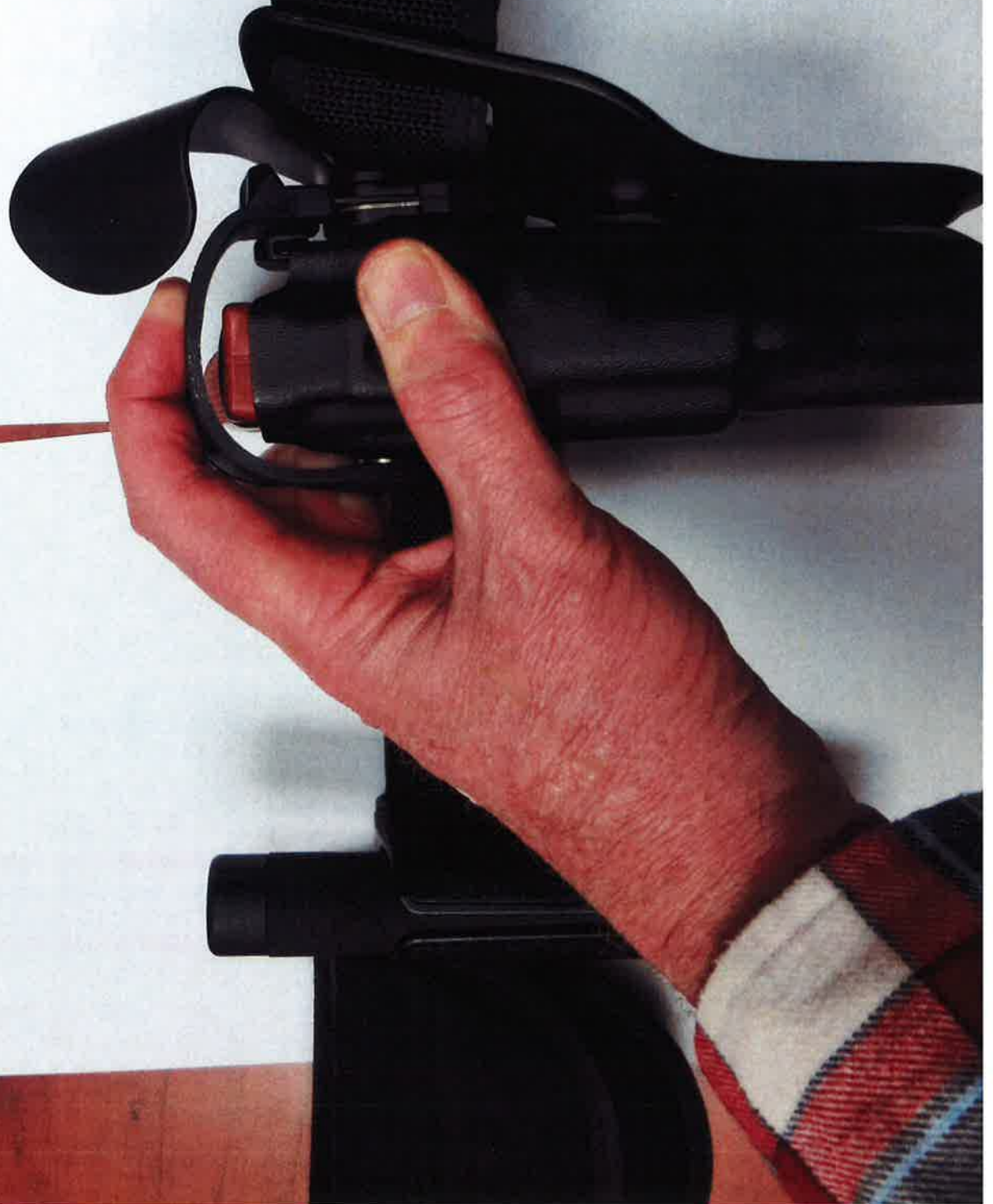












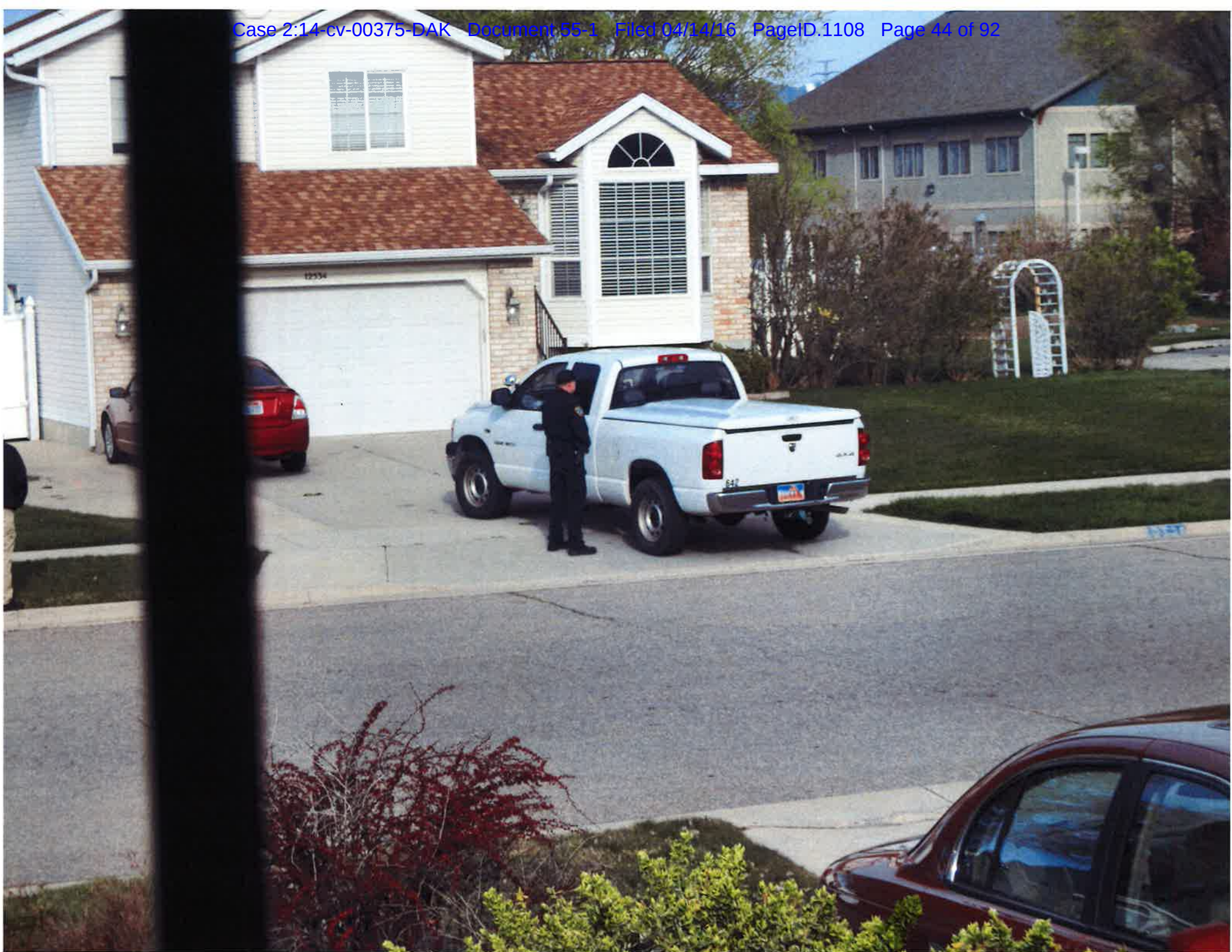


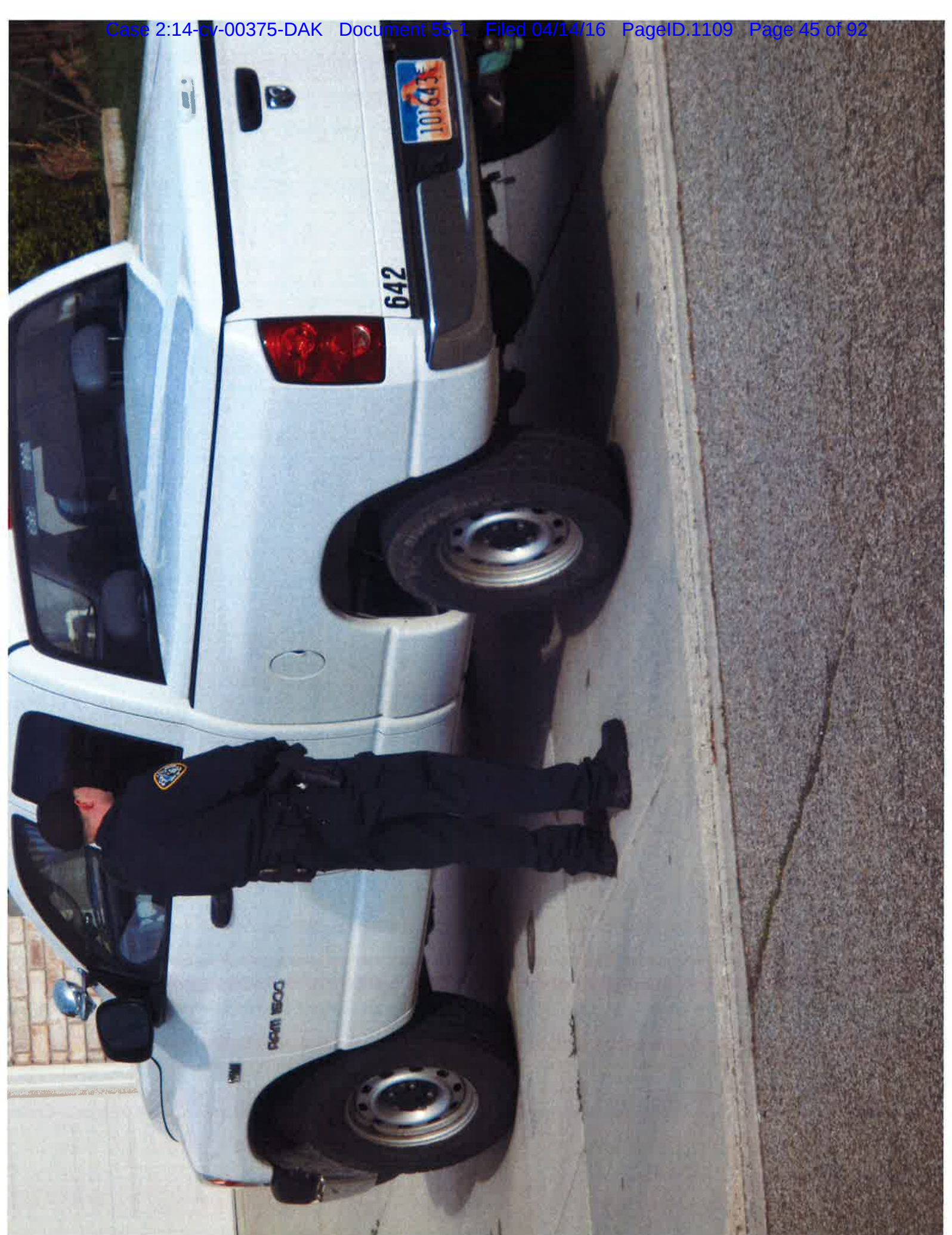




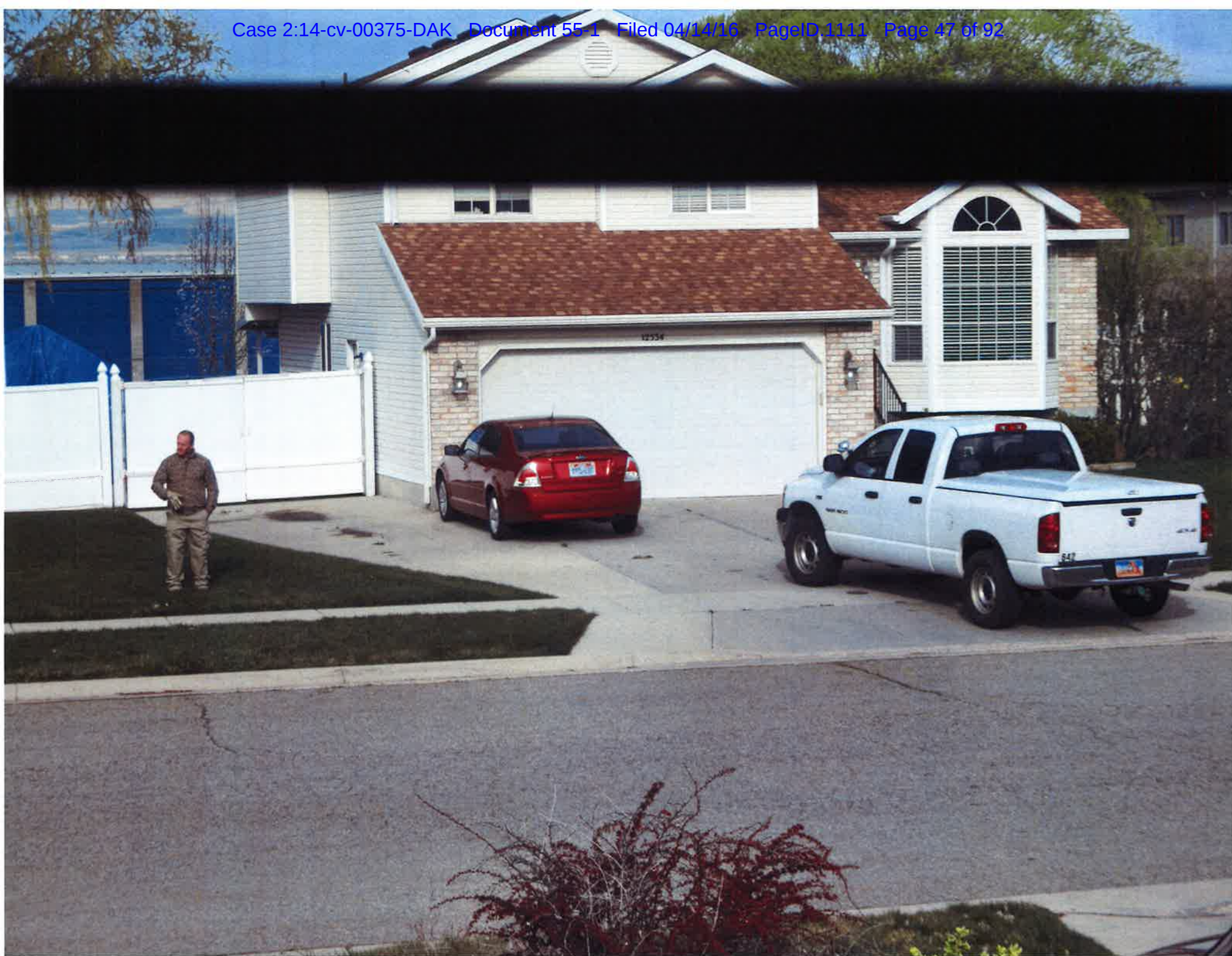








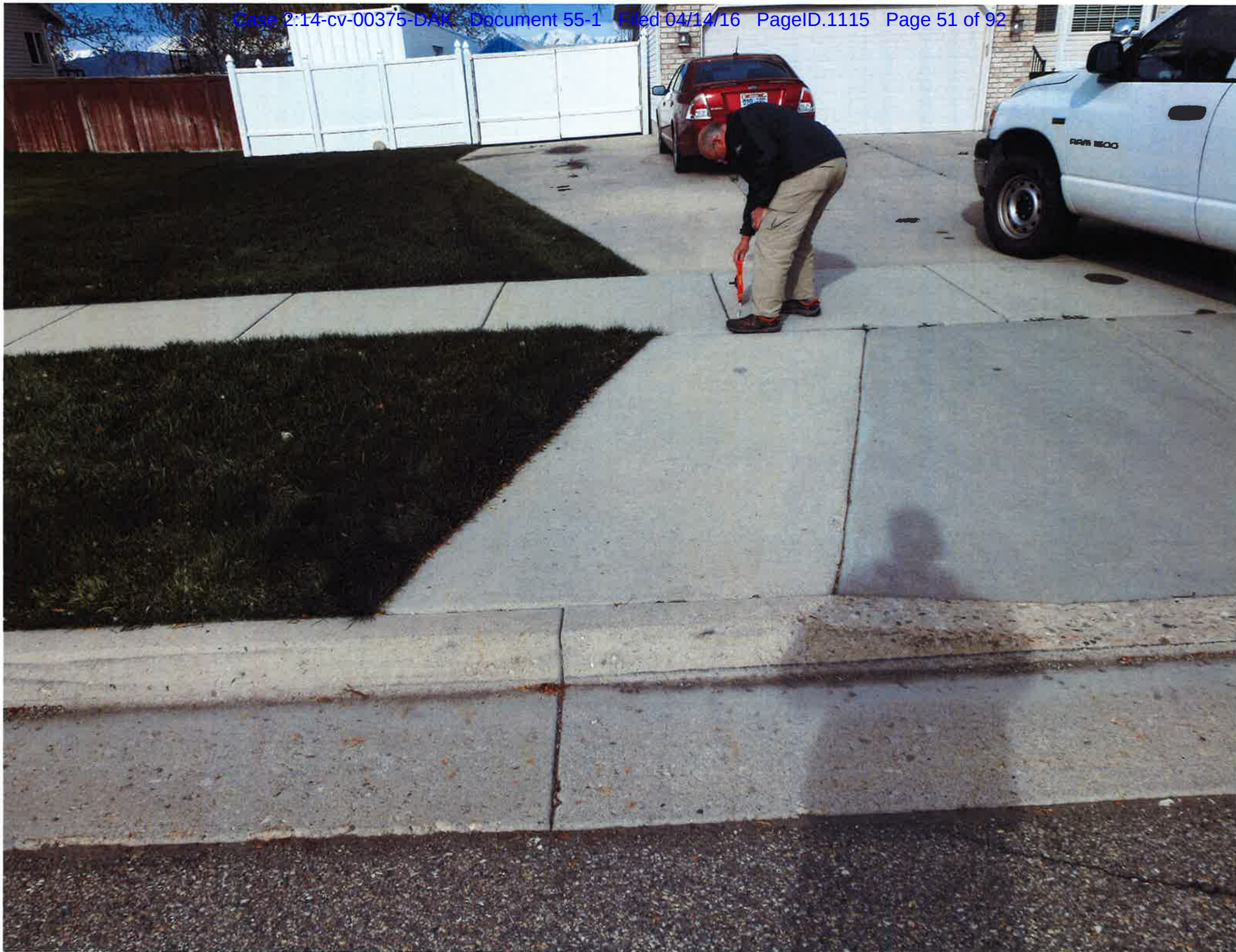




















Curriculum Vitae

CV - 2016

April 11, 2016

Chris W. Lawrence

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Introduction

Chris Lawrence

With over 35 years of police related experience Chris' past assignments have included Patrol, Underwater Search and Recovery, Marine Enforcement, Tactical and Rescue Unit, Criminal Investigation, and Training in one of Canada's largest municipal police services.

Since 1996, Chris has been an instructor at one of North America's largest police training facilities, where his duties focused on defensive tactics and use of force. From 2008 until 2011, Chris was seconded to a national research center where he was a Project Manager for research involving Less-Lethal Weapons, In-Custody Death and Personal Protective Equipment.

Chris holds a Master's degree in Leadership and Training specializing in Justice and Public Safety from British Columbia's Royal Roads University. Since 2004 he has been a Technical Advisor to the Force Science Institute Ltd., is a member of the International Law Enforcement Forum Advisory Board and a founding member of the Canadian Association of Chiefs of Police, Use of Force Committee.

He has presented on the topic of police use of force and sudden in-custody deaths throughout North America, as well as Australia and Europe, to police executives, investigators, trainers, and line officers, as well as medical and legal staff and has been permitted to provide expert opinion in several North American jurisdictions. Chris is also the author of many articles and book chapters related to these subjects.

CHRIS W. LAWRENCE

PO Box 22033 Elmwood Square
St. Thomas, Ontario,
N5R 6A1

(519) 871-3459

Employment

2015 – Present

Ontario Police College

Instructor, Firearms Section

Responsibilities

- Instruct police officers in appropriate firearms tactics and related procedures.
- Supervise seconded and contract instructors.
- Develop lesson plans, examinations and assignments as required.
- Conduct classroom lectures, demonstrations and practices in relevant police firearms tactics and related procedures.
- Monitor and evaluate student progress, providing remedial training as required.
- Administer practical examinations as required.
- Prepare student reports.
- Training trainers from police services as required.
- Provide leadership to seconded and contract members of Ontario Police College staff.
- Maintain proficiency as a defensive tactics and officer safety instructor and assist Defensive Tactics and Officer Safety Section in delivering related training to students at all levels as required.
- Provide input to various curriculum revision committees.
- Represent the Ontario Police College on committees, at seminars, hearings, and inquests or in court to offer testimony as a resource authority on matters related to firearms training.
- Maintain liaison with police services in relation to officer safety training tactics and related procedures, training developments, innovations and concerns.

2011 – 2014

Ontario Police College

Instructor, Officer Safety Section

Responsibilities

- Instruct police officers in appropriate officer safety tactics and related procedures.
- Supervise seconded and contract instructors.
- Develop lesson plans, examinations and assignments as required.
- Conduct classroom lectures, demonstrations and practices in relevant officer safety tactics and related procedures.
- Monitor and evaluate student progress, providing remedial training as required.
- Administer practical examinations as required.
- Prepare student reports.
- Training trainers from police services as required.
- Provide leadership to seconded and contract members of Ontario Police College staff.

- Maintain proficiency as a firearms instructor and assist Firearms Section in delivering firearms training to students at all levels as required.
- Provide input to various curriculum revision committees.
- Represent the Ontario Police College on committees, at seminars, hearings, and inquests or in court to offer testimony as a resource authority on matters related to officer safety training.
- Maintain liaison with police services in relation to officer safety training tactics and related procedures, training developments, innovations and concerns.

2008 – 2011 Canadian Police Research Centre – (Secondment)

The Canadian Police Research Centre (CPRC) is led by Defence Research and Development Canada's (DRDC) Centre for Security Science (CSS) providing science and technology services and support to address national public safety and security objectives. The centre's capabilities are in leading and administering research, development, testing and evaluation of technologies; identifying future trends and threats; as well as networking national and international science and technology (S&T) partners within the public safety and security communities.

Program Manager: Less-Lethal Weapons Personal Safety Equipment In-Custody Death

The Program Manager carries responsibilities as described below for a specific theme or topic as assigned by the Executive Director of the CPRC consistent with the overall strategic way ahead as approved by the Director General, DRDC CSS.

Responsibilities

CPRC Project Direction. The Program Manager will direct CPRC projects to ensure their implementation and execution according to agreed plans. Day-to-day contact will be required with project managers, the project teams and with the CPRC communities. Specific duties may include:

- coordinating and arranging for technical and operational review of proposals;
- recommending adjustments to the project plan or other matters;
- preparing project documents as required;
- ensuring execution of procedures for approval of, and adjustments to projects;
- conducting periodic project review with the project manager, the project team and representatives of other appropriate departments;
- reporting periodically to senior management of progress and where issues require resolution; and
- recommending discontinuance or deciding to discontinue work on a project when cost effective and/or when schedule objectives appear unobtainable.

Program Managers are also responsible for:

- CPRC Financial Management
- Coordination of CPRC Communities
- Support of the CPRC Annual Business Cycle
- Development and Maintenance of the CPRC Framework

- Development and Staffing of Treasury Board Submissions
- Stakeholder Relations and Collaboration Agreements
- Direction of Additional In-Year CPRC Activities

Other related duties will include:

- responding to enquiries from senior departmental officials;
- preparing briefing notes and other correspondence for officials;
- preparing and participating in exhibitions, trade shows, conferences and seminars;
- representing the CPRC program in meetings with other government departments and foreign governments;
- consulting with the S&T and operational communities to determine requirements and gaps in which S&T can contribute; and
- updating the operational requirements.

2000 - 2008 Ontario Police College

Team Leader, Defensive Tactics Training Section

Responsibilities

- Develop course content in appropriate and lawful use of police defensive tactics.
- Conduct classroom lectures, demonstrations and practices in relevant and prescribed defensive tactics techniques, restraint and control of individuals, use of handcuffs, baton, chemical agents, prisoner search techniques, arrest and control of armed subjects.
- Monitoring and evaluating student progress, providing remedial training as required.
- Administering practical examinations.
- Preparing student reports.
- Training trainers from other police services.
- Provide group leadership for the defensive tactics section.
- Providing input to various curriculum revision committees
- Represent the Ontario Police College on various committees, at seminars, hearings, and inquests or in court to offer testimony as a resource authority on matters related to defensive tactics training.
- Maintain liaison with police services in relation to Defensive Tactics training developments, innovations and concerns.

1999 - 2001 Ontario Police College

Team Leader, Interactive Judgment Simulator Training

Responsibilities

- Coordinate Basic Constable Interactive Judgment Simulator program.
- Supervise seconded and contract instructors.
- Teach Interactive Judgment Simulator Facilitators program.
- Examine Simulator Operator instructor candidates on final practical examination.
- Develop lesson plans, examinations and assignments for the Basic Constable Interactive Judgment Simulator program, Interactive Judgment Simulator Facilitators program Use of Force Trainers program, and Infectious Disease Control in the Workplace.
- Conduct classroom lectures, demonstrations and practices relevant to Interactive Judgment Simulator training.
- Monitor and evaluate student progress, providing remedial training as required.

- Administer practical examinations.
- Prepare student reports.
- Training trainers from police services.
- Provide leadership to seconded and contract members of the Basic Constable Program Interactive Judgment Simulator instructor cadre.
- Instruct police officers in appropriate and lawful use of police defensive tactics.
- Maintain proficiency as a firearm instructor and defensive tactics instructor. Assist Firearms and Defensive Tactics Sections in delivering training to students at all levels as required.
- Provide input to various curriculum revision committees.
- Represent the Ontario Police College on various committees, at seminars, hearings, and inquests or in court to offer testimony as a resource authority on matters related to Interactive Judgment Simulator training.
- Maintain liaison with police services in relation to Interactive Judgment Simulator training developments, innovations and concerns.

1996 – 2000 Ontario Police College

Instructor, Defensive Tactics Training Section

Responsibilities

- Instruct police officers in appropriate and lawful use of police defensive tactics.
- Coordinate Basic Constable Defensive Tactics program.
- Supervise seconded and contract instructors.
- Teach Defensive Tactics Facilitators program.
- Coordinate recruit training regarding Infectious Disease Control in the Workplace.
- Facilitate Use of Force Judgment Training with Judgment Simulators for Basic Constable Program
- Examine Simulator Operator instructor candidates on final practical examination.
- Develop lesson plans, examinations and assignments for the Basic Constable Defensive Tactics program, Defensive Tactics Facilitators program Use of Force Trainers program, and Infectious Disease Control in the Workplace.
- Conduct classroom lectures, demonstrations and practices in relevant and prescribed defensive tactics techniques, restraint and control of individuals, use of handcuffs, baton, chemical agents, prisoner search techniques, arrest and control of armed subjects.
- Monitor and evaluate student progress, providing remedial training as required.
- Administer practical examinations.
- Prepare student reports.
- Training trainers from police services.
- Provide leadership to seconded and contract members of the Basic Constable Program Defensive Tactics instructor cadre.
- Maintain proficiency as a firearms instructor and assist Firearms Section in delivering firearms training to students at all levels as required.
- Provide input to various curriculum revision committees.
- Represent the Ontario Police College on various committees, at seminars, hearings, and inquests or in court to offer testimony as a resource authority on matters related to defensive tactics training.

- Maintain liaison with police services in relation to defensive tactics training developments, innovations and concerns.

1994 - 1996 Peel Regional Police

Uniform Patrol Officer - 21 Division

Responsibilities:

- General patrol duties and response in the Bramalea and Malton area

1992 - 1994 Peel Regional Police

Criminal Investigation Bureau - 21 Division

Responsibilities:

- Investigation of serious criminal matters such as robbery, arson, major assaults, theft, possession of stolen property and investigating sudden and suspicious deaths.
- Assigned to a victim in a witness protection program.
- Preparing cases for the Crown and presenting them in court.

1989 - 1992 Peel Regional Police

Tactical and Rescue Unit - Headquarters

Responsibilities:

- Operational member of the tactical and rescue unit. The unit task was to provide tactical support in all high risk and potentially life threatening situations, using techniques of containment and negotiations to assist in the preservation of life. The objective of the unit was to prevent the loss of life.

Taskings included:

- barricaded suspect(s)
- hostage rescue
- high risk warrant executions (arrest and search)
- VIP security - Pearson International Airport
- escort of known violent prisoners
- static surveillance where violence may be expected
- counter-terrorist measures
- area or building searches for a wanted person, weapon or physical evidence
- special arrest team
- high risk court security
- high risk prisoner transport
- explosive entries of buildings
- designated unit sniper
- high level rappelling and rescue
- assist K-9 suspect tracks
- high risk vehicle stops
- training other members of police service in safe patrol tactics and tactical unit functions

1992 - 1995 Sheridan College - Davis Campus

Adjunct Faculty Member, Defensive Tactics Instructor - Law and Security Administration

Responsibilities:

- Develop course content in defensive tactics for students studying to become police officers or security officers.
- Conduct classroom lectures, demonstrations and practices in relevant and prescribed defensive tactics techniques, restraint and control of individuals, use of handcuffs, prisoner search techniques, and arrest and control of resistive subjects.
- Monitor and evaluate student progress.
- Develop and administer student exams and reports.

1988 - 1989 Peel Regional Police

Uniform Patrol Officer - 22 Division

Responsibilities:

- General patrol duties in the city of Brampton area.
- Primary function was working as a station duty officer at 22 Division (E Platoon) with specific duties as Booking Officer for 22 Division and Headquarters custody area.
- Act as a Patrol Sergeant as required.

1983 - 1988 Peel Regional Police

Marine Unit Coordinator - Headquarters

Responsibilities:

- Coordinate, supervise and crew the operation of the Marine Unit.
- Maintain the vessels and equipment in a ready condition.
- Train the crew in safe and professional vessel operation, enforcement of appropriate statutes, search and rescue, towing, salvage and boating etiquette.
- Assist Canadian Coast Guard in search and rescue.
- Assist Peel Regional Police Dive Team in search and recovery.
- Assist members of the Peel Regional Police with maritime intelligence and assistance as required.
- Liaise with other police services and assist with marine related investigations as necessary, including Metro Toronto Police and R.C.M.P.
- Assisted the R.C.M.P. in investigations and tracking of smuggled vessels and marine engines entering Canada.

1984 - 1988 Peel Regional Police

Underwater Search and Recovery Unit - Headquarters

Responsibilities:

- Was an operational member of Dive Team.
- Provide underwater search and recovery of victims and property for investigations.
- Provide testimony in court in relation to such recoveries.
- Act as On Duty Dive Master as required, including team call outs, dive planning, supervision of dive sites
- Provide team training on rotational basis.
- Maintain training status to enable sub-ice search and recoveries.

1983 - 1989 Peel Regional Police

Uniform Patrol Officer - 22 Division

Responsibilities:

- General patrol duties in the western half of the City of Mississauga.

Note:

From 1984 to 1988 I served on the Marine Unit from April to November on a full-time basis. During the winter months I returned to regular patrol duties. The position on the Dive Team was on an "as needs" basis with regular year round training forming part of my regular duties regardless of other assignments. A similar arrangement was in place when I was utilized as a defensive tactics instructor. During my full-time assignment as a member of the Tactical Unit, I was loaned out to the training bureau on a continuing basis.

My employment at Sheridan College was on a contract basis while I was a member of the Peel Regional Police.

1979 - 1983 St. Thomas City Police

Uniform Patrol Officer

Responsibilities:

- General patrol duties within the City of St. Thomas with emphasis on foot patrol, prisoner escort and court security details.

Education

1992 – 1995 Sheridan College, General Arts and Science Program.

2003 – 2005 Royal Roads University, Master of Arts, Leadership and Training.

Honors, Awards, and Appointments

- Appointed to St. Thomas Public Library Board of Directors – 1999-2010.
- Appointed to the Technical Advisory Board, Force Science Institute – 2004 Present.
- Appointed Columnist for PoliceOne.com –2005-2007;
<http://www.policeone.com/writers/columnists/ChrisLawrence>
- Appointed to an Expert Advisory Group, British Columbia Ministry of Public Safety and Solicitor General, Police Services Division. – 2006-2010.
- Ontario 2006 Volunteer Award, Province of Ontario - St. Thomas Public Library Board of Trustees.
- Outstanding Achievement Award: Peer Employee Recognition Committee, Ontario Police College –2006.
- Research Partner appointment, National Research Council, Canadian Police Research Centre – May 2006-2012.
- Appointed to the Working Group - Canadian Police Research Centre, National Research Council, Update on Conducted Energy Devices – 2008.
- Appointed to the Royal Canadian Mounted Police, Public and Police Safety Committee (formerly the National Working Group, Incident Management Intervention Working Group) – 2008 - 2014.

- Commissioned Kentucky Colonel by Governor Steven L. Beshear – 2008.
- Appointed to Conducted Energy Weapons Training Design Working Group, Ministry of Community Safety and Correctional Services, Ontario –2008 – 2014.
- Canadian Association of Chiefs of Police, Use of Force Committee Member –2010-Present.
- Appointed to the working group addressing Use of Force Skills Perishability, Police Sector Council, Toronto, Ontario – 2011.
- Appointed to Advisory Board, International Law Enforcement Forum on Minimal Force Options – 2014.
- Advanced Specialist in the Behavioral Analysis of Force Encounters, Conferred by Force Science Institute – 2015.

Professional Training/Conferences

- 2015 Advanced Specialist in the Behavioral Analysis of Force Encounters Program, Force Science Institute,
Chicago, Illinois
- 2015 Body Cameras and Other Recording in Law Enforcement: Critical Force Science Issues Impacting Investigations, Policy and Incident Analysis, Force Science Institute,
Chicago, Illinois
- 2015 The Law of Policing Conference, The Canadian Institute,
Toronto, Ontario
- 2015 8th European Non-Lethal Weapons Symposium,
Ettlingen, Germany
- 2015 International Association of Law Enforcement Educators and Trainers Annual Conference, Chicago, Illinois.
- ◆ Below 100 Instructor-Trainer Course
- 2014 Conducted Energy Weapon Master Trainer Workshop, Ontario Police College
Aylmer, Ontario.
- 2014 International Law Enforcement Forum –Managing Potentially Violent Encounters and Policing with the Community.
Dublin & Derry-Londonderry, Northern Ireland.
- 2014 Expert Evidence Workshop, Royal Canadian Mounted Police,
Ottawa, Ontario.
- 2013 Shooting Reconstruction 1, Northwestern University, Center for Public Safety, Evanston,
Illinois.
- 2013 International Association of Law Enforcement Educators and Trainers Annual Conference, Chicago, Illinois.
- 2012 Expert Meeting: “Incapacitating chemical agents”: Law Enforcement, Human Rights Law and Policy Perspectives, International Committee of the Red Cross.
Montreux, Switzerland.
- 2012 Southeast Regional Warriors Conference
Orlando, Florida.
- 2011 International Association of Chiefs of Police 118th Annual Conference
Chicago, Illinois.
- 2011 Law Enforcement Response to Mental Illness, Delaware State Police and Criminal Justice Council.
Dover, Delaware

- 2011 Symposium on Providing Expert Evidence Testimony, RCMP Pacific Region Training Centre,
Abbotsford, British Columbia
- 2010 Defence Research and Development Canada, Public Security Science & Technology Symposium 2010,
Ottawa, Ontario
- 2010 The Law of Policing Conference, The Canadian Institute,
Toronto, Ontario.
- 2010 International Association of Law Enforcement Educators and Trainers Annual Conference, Chicago, Illinois.
- 2010 Competency Based Project Management, Masters/Boychuk Consulting,
Ottawa, Ontario.
- 2010 Soldier Systems Technology Roadmap, C4I (Command, Control, Communications, Computers, and Intelligence) & Sensors Workshop,
Montreal, Quebec.
- 2009 Soldier Systems Technology Roadmap, Lethal and Non-Lethal Weapons Effects Workshop,
Toronto, Ontario.
- 2009 Personal Protective Equipment Conference, Technical Support Working Group, Combating Terrorism Technical Support Office, Fort Lauderdale, Florida.
- 2009 Sudden Death, Excited Delirium and In-Custody Death Conference, Institute for the Prevention of In-Custody Deaths. Inc., Las Vegas, Nevada.
- 2009 International Law Enforcement Forum –Conference on Less Lethal Weapons. Bramshill, England.
- 2009 Winning Mind Training – Excellence in Training.
Calgary, Alberta.
- 2009 Defence Research and Development Canada, Public Security Science & Technology Symposium 2009,
Ottawa, Ontario
- 2009 Canadian Centre for the Prevention of In-Custody Deaths Annual Conference
Niagara Falls, Ontario
- 2009 International Law Enforcement Educators and Trainers Association Annual Conference, Chicago Illinois
- 2008 Institute for Law Enforcement Administration, Police Use of Force: Less-Lethal Weapons and In-Custody Deaths, Plano, Texas
- 2008 OnScene 2008 Conference
Regina, Saskatchewan.
- 2008 Canadian Association of Chiefs of Police Annual Conference
Montreal, Quebec.
- 2008 National Sheriff's Association Annual Conference,
Indianapolis, Indiana.
- 2008 International Association of Law Enforcement Educators and Trainers Annual Conference, Chicago, Illinois.
- 2008 Force Science Centre Certification Course (Human Factors and Use of Force Analysis), Force Science Research Centre and London Metropolitan Police.
London, England.

-
- 2007 Sudden Death, Excited Delirium and In-Custody Death Conference, Institute for the Prevention of In-Custody Deaths. Inc., Las Vegas, Nevada.
 - 2007 International Association of Chiefs of Police 114th Annual Conference
New Orleans, Louisiana.
 - 2007 Simulation Technology Conference, “Skills Acquisition & Retention”
Royal Canadian Mounted Police Training Academy - Depot Division, Regina,
Saskatchewan.
 - 2007 Ontario Crown Attorney’s Association, Summer Seminars: Expert Witnesses
University of Western Ontario, Faculty of Law, London, Ontario
 - 2007 National Sheriff’s Association Annual Conference,
Salt Lake City, Utah.
 - 2007 Metropolitan London Police, Directorate of Professional Standards, Necessary Force:
Issues around the most Contentious Police Deaths – London, England.
 - 2007 International Association of Law Enforcement Educators and Trainers Annual
Conference, Chicago, Illinois.
 - 2006 TASER™: Use of Force, Risk Management and Legal Strategies For Chiefs, Sheriffs,
Risk Managers and Legal Advisors, Toronto, Ontario.
 - 2006 International Association of Chiefs of Police 113th Annual Conference
Boston, Massachusetts.
 - 2006 National Tactical Officer’s Association Annual Conference,
Burbank, California.
 - 2006 National Sheriff’s Association Annual Conference,
Orlando, Florida.
 - 2006 International Association of Law Enforcement Educators and Trainers Annual
Conference, Chicago, Illinois.
 - 2006 Resources and Responses Conference: Helping People with Mental Illness in Crisis,
Belleville, Ontario.
 - 2005 Expert Evidence in Criminal Proceedings, CLE Professional Development,
Osgoode Hall Law School, Toronto, Ontario.
 - 2005 Professional Standards Conference,
Toronto, Ontario.
 - 2005 Canadian Officer Safety Conference,
Victoria, British Columbia.
 - 2005 International Wildfire Firefighting Simulation Conference,
Wausau, Wisconsin.
 - 2005 American Society of Law Enforcement Training Annual Conference,
Jacksonville, Florida.
 - 2004 International Association of Law Enforcement Educators and Trainers Annual
Conference, Chicago Illinois
 - 2004 American Society of Law Enforcement Training Annual Conference,
St. Louis, Missouri
 - 2003 International Academy of Law and Mental Health - 28th Congress on Law and Mental
Health, Sydney, Australia.
 - 2003 PPCT Training Conference, Use of Force – Human Factors
Instructor / Trainer Re-Certification
 - ◆ Weapon Retention and Disarming

- ◆ Collapsible Baton
- ◆ Impact Weapons Instructor
- ◆ Pressure Point Control Tactics
- ◆ Defensive Tactics
- 2003 International Conference on Special Needs Offenders (Canada),
Special Needs Offenders (Canada) Inc., Toronto, Ontario
- 2003 Use of Force Conference
National Criminal Justice Training Counsel, Chicago Illinois
- 2003 Clandestine Labs, Chemical, Biological, Radiological, Nuclear Response Seminar,
Heroux Devtek & Levitt Safety Limited, Kitchener, Ontario
- 2003 Ballistic Armour Course, Fundamentals of Body Armour,
Ceramic Protection Corporation, Oakville, Ontario
- 2003 American Society of Law Enforcement Training Annual Conference,
Ontario, California
- 2002 International Association of Chiefs of Police 109th Annual Conference, Minneapolis,
Minnesota
- 2002 Germ Alert! Anthrax, Smallpox and Pathogenic Microbes
Institute for Natural Resources – BIOMED, London Ontario
- 2001 PPCT Training Conference, Use of Force – Human Factors
Instructor / Trainer Re-Certification
 - ◆ Weapon Retention and Disarming
 - ◆ Collapsible Baton
 - ◆ Impact Weapons Instructor
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
- Instructor / Trainer Certification
 - ◆ Inmate Control
 - ◆ Violent Student Management
- Pressure Point Control Tactics Management Systems
St. Louis, Missouri
- 2001 Advanced Taser Instructor Certification
Taser International
- 2000 Less Lethal Technology Instructor Course
 - ◆ Taser International Immobilization Weapon
 - ◆ Kinetic Impact Munitions
- Pinetree Law Enforcement Products, Sarnia, Ontario
- 1999 PPCT Training Conference
Instructor / Trainer Re-Certification
 - ◆ Weapon Retention and Disarming
 - ◆ Collapsible Baton
 - ◆ Impact Weapons Instructor
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
- Instructor / Trainer Certification
 - ◆ Violent Patient Management

- ◆ Sexual Harassment, Assault, Rape Prevention
- Pressure Point Control Tactics Management Systems
- St. Louis, Missouri
- 1999 Defensive Tactics Instructor School, Federal Bureau of Investigation
- Peekskill, New York
- 1999 Captor Advanced Incapacitant Spray
- Pinetree Law Enforcement Products
- 1998 Examination Writing Seminar
- Ontario Police College
- 1998 Instructor / Trainer Re-Certification Course
 - ◆ Weapon Retention and Disarming
 - ◆ Collapsible Baton & Impact Weapons Instructor
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
- Pressure Point Control Tactics Management Systems
- St. Louis, Missouri
- 1998 Pistol Instructors Course
- Ontario Police College
- 1998 American Society of Law Enforcement Trainers Annual Conference,
- Mobile, Alabama
- 1997 Interactive Computer Assisted Trainer Editor Course
- FATS, Inc.
- 1997 Frank Cucci Seminar
- Tactical Edge Inc.
- 1997 Adult Education Course
- Ontario Police College
- 1997 Sudden Custody Death Syndrome Instructor
- RIPP Restraints Inc.
- Dearborn, Michigan
- 1997 Tactical Ground Control Instructor
- Tactical Ground Control Systems
- 1996 Judgment Simulator Operator's Course
- Ontario Police College
- 1996 Use of Force Trainers Course
- Ontario Police College
- 1996 Defensive Tactics Facilitators Course
- Ontario Police College
- 1996 Instructor / Trainer Course
 - ◆ Dynamic Training Simulations
 - ◆ Weapon Retention and Disarming
 - ◆ Impact Weapons
 - ◆ Collapsible Baton
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
- Pressure Point Control Tactics Management Systems
- St. Louis, Missouri

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- 1994 Advanced Patrol Tactics
Ontario Police College
 - 1993 Developing Use of Force Policies
Pressure Point Control Tactics Management Systems
Ann Arbor, Michigan
 - 1993 Sexual Harassment and Rape Prevention, Instructor
Pressure Point Control Tactics Management Systems
Lincoln, Nebraska
 - 1992 Instructor / Trainer Course
 - ◆ Tactical Baton
 - ◆ Impact Weapons
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
 Pressure Point Control Tactics Management Systems
St. Louis, Missouri
 - 1992 Instructor Course
 - ◆ Tactical Baton
 - ◆ Impact Weapons
 - ◆ Pressure Point Control Tactics
 - ◆ Defensive Tactics
 Pressure Point Control Tactics Management Systems
St. Louis, Missouri
 - 1992 Oleoresin Capsicum Spray Instructor Course
Def-Tec Corporation
 - 1992 Verbal Judo
Peel Regional Police
 - 1991 Collapsible Baton Course
Peel Regional Police
 - 1991 Sniper Seminar and Competition
Western Michigan Tactical Officers Association, Fort Custer, Michigan
 - 1991 Unit Sniper Course
Tactical and Rescue Unit - Peel Regional Police
 - 1991 Instructor Course
 - Pressure Point Control Tactics
 - Impact Weapons
 - Side Handle Baton Instructor
 - Defensive Tactics
 Pressure Point Control Tactics Management Systems
 - 1991 Spontaneous Knife Defense Instructor Course
Pressure Point Control Tactics Management Systems
 - 1991 High Risk Tactical Training
Los Angeles Police Department, S.W.A.T.
 - 1991 Officer Safety - Officer Survival
Los Angeles Police Department, S.W.A.T.
 - 1990 Tactical Rescue Course
Metropolitan Toronto Police, Emergency Task Force

- 1990 High Level Rappelling, Rescue and Tactics,
Brampton Fire Department
- 1989 Basic Tactical Officer Orientation Course
Tactical and Rescue Unit - Peel Regional Police
- 1988 Search and Rescue, Level Two
Canadian Coast Guard
- 1988 Sub-Ice Diver Re-Qualification Course
Ontario Provincial Police
- 1987 Marine Officer Boat Operator's Course
Marine Unit - Peel Regional Police (Instructor)
- 1987 Pressure Point Control Tactics - Instructor
Smith and Wesson Academy
- 1987 Open Water Diver, Re-Qualification Course
Ontario Provincial Police
- 1987 Sub-Ice Diver, Re-Qualification Course
Ontario Provincial Police
- 1986 Search and Rescue, Level One
Canadian Coast Guard
- 1986 Open Water Diver, Re-Qualification Course
Ontario Provincial Police
- 1984 Unit Diver Course - Underwater Search and Recovery Unit
Peel Regional Police
- 1984 Street Survival Seminar
Caliber Press
- 1984 Local Procedures Course
Peel Regional Police
- 1984 Radar Operator's Course
Peel Regional Police
- 1983 Orientation Course
Peel Regional Police
- 1983 Baton Instructor Level One
Superior Baton and Police Tactics Co.
- 1983 Probationary Constable Course - Part B
Ontario Police College
- 1982 Probationary Constable Course - Part A
Ontario Police College
- 1982 Basic and Recruit Course, Canadian Armed Forces, Royal Canadian Regiment

PROFESSIONAL ASSOCIATIONS

- National Tactical Officers Association
- Ontario Association of Police Educators
- Ontario Provincial Police Association
- Police Association of Ontario
- International Association of Chiefs of Police – Associate Member
- International Law Enforcement Educators and Trainers Association - Charter Member
- Force Science Institute – Technical Advisor

- Police Executive Research Forum – Subscribing Member
- International Law Enforcement Forum
- Canadian Association of Chiefs of Police – Associate Member; Use of Force Advisory Committee Member
- Defense Research Development Canada – Police Community of Practice Member
- Department of Psychology, Police Research Lab, Carleton University – Research Affiliate

ACCOMPLISHMENTS

- Instructed defensive tactics to probationary constables at the Ontario Police College, on a part-time basis, while a member of St. Thomas City Police - 1983 to 1985.
- Provided in-service training to members of the Haldimand - Norfolk Regional Police while a member of St. Thomas City Police - 1984.
- Assisted in training OPP District Training Officers in handgun retention and baton techniques while a member of the Peel Regional Police - 1985.
- Trained a special arrest team for deployment by Peel Regional Police at Gateway Postal Facility during national postal strike - 1987.
- Re-established a Marine Unit within the Peel Regional Police Service. Equipped, tasked and trained the unit into a credible enforcement presence on Lake Ontario– 1984 to 1988.
- Peel Regional Police Association Basketball Team Member - Canadian Police Basketball Champions – 1988.
- Assisted in establishing a Tactical Sniper Course for the Peel Regional Police - 1991.
- Successfully completed a hostage rescue as entry team leader, Christmas day 1991.
- Designed a defensive tactics program for Sheridan College of Applied Arts and Sciences, Davis Campus, Law and Security Administration.
- Authored the Use of Force Policy for Bramalea Limited - 1992.
- Designed a custom defensive tactics-training program for Bramalea Limited - 1992.
- Provided all use of force training for Bramalea Limited in the Greater Toronto area and Ottawa.
- Co-facilitated the Ontario Police College Basic Tactical Officers Course, Design Team, 1996.
- Collaborated with the Elgin St. Thomas Health Unit in developing a self-study guide and lecture for the Ontario Police College on Infectious Diseases - 1996.
- Represented the Ontario Police College on developing provincial standards on Infectious Disease Control for police officers in Ontario - 1996.
- Chaired a committee regarding training police officers in relation to proposed provincial standards on Infectious Disease Control for police officers in Ontario - 1996.
- Maintained Instructor/Trainer status with PPCT 1992-2005.
- Working Group Sub-committee member – National Use of Force Model – 1999.
- Project Manager – Acquisition of New Police Interactive Judgment Training Simulators, Ontario Police College – 2000.
- “Streetscape” Committee member. Involved in the development of the new Dynamic Simulation Training Area at the Ontario Police College – 2000 to 2001.
- Designated as Ontario Ministry of the Solicitor General subject matter expert for assessment of Perimeter Control and Containment Team, Tactical Team and Hostage Rescue Team related to Ministry Accredited Training - 2000.

- Consulted by the Windsor Police Service, Police Service Board deliberation regarding a challenge to the continued use of pepper spray; Windsor Ontario – August 2001.
- Researched and designed a video training package for Ontario Police Video Training Alliance in collaboration with Ministry of the Solicitor General's Legal Branch, regarding police authorities and limitations when entering private property without warrant – 2001.
- Consulted by Durham Regional Police Service regarding information with respect to RIPP Hobble Restraint of violent prisoners – 2002.
- Consulted by the Royal Canadian Mounted Police regarding training and deployment of the RIPP Hobble Restraint for control of violent prisoners and the investigation of Sudden In-Custody Deaths; Regina, **Saskatchewan** –2002.
- Developed an Escape and Evasion Program as part of the Advanced Undercover Officer Training Course for the Criminal Intelligence Service Ontario – 2002.
- Developed and facilitated an Enforcement Officers Self Defense Program for Ontario's Ministry of the Attorney General, Court Services Division – 2002.
- Consulted by the Royal Canadian Mounted Police, National Policy Section, National Contract Policing Branch, Community, Contract and Aboriginal Policing Services regarding policy, training and deployment of the RIPP Hobble Restraint for control of violent prisoners; Aylmer, Ontario – March 2003.
- Consulted by Niagara Regional Police Service regarding the retention of firearms in holding cells - June 2003.
- Consulted by the Ministry of Community Safety and Correctional Services, CISU, regarding the lawful authority and standards of care relating to the use of chemicals munitions by Correctional officers – April 2004.
- Collaborated in the design and development of a video training package for the Ontario Police Video Training Alliance regarding police use of force training – 2004.
- Reviewer; "Not just another call... Police response to people with mental illness in Ontario. A practical guide for the frontline officer – 2004.
- Video Training CD, ALERT Publishing Inc., Sudden and Unexpected Deaths Following an Altercation with Law Enforcement – April 2004.
- Consulted by the British Columbia Office of the Public Complaints Commissioner, Taser Review Team – August 2004.
- Consulted by the Niagara Regional Police Service regarding training requirements for Tactical and Rescue Units vs. Hostage Rescue Units – March 2005.
- Consulted by the Peel Regional Police Service regarding "Post Pursuit Vehicle Extraction" – June 2005.
- Consulted by Canadian Police Research Centre, Sudden Unexpected Deaths Proximal to Taser Use – August 2004 - August 2005
- Seconded to the Canadian Police Research Centre, National Research Council, Review of Conducted Energy Devices – May to August 2005.
- Consulted by League of **Minnesota** Cities, Insurance Trust regarding policy development, Law Enforcement Responses to Excited Delirium – October 2005;
<http://www.lmnc.org/pdfs/LMCITMemos/ExcitedDelirium.pdf>.
- Consulted by the **Las Vegas** Metropolitan Police Department regarding training and policy regarding Police Response to Excited Delirium – May 2006.

- Member of Law Enforcement Team - National Study On Neck Restraints in Policing, conducted by Canadian Police Research Centre and Calgary Police Service – October 2006.
- Consulted by William J. Everett, author; Law Enforcement Responses to Excited Delirium, Police Accredited Training OnLine (PATROL **Minnesota**)
<http://www.nexportsolutions.com/patrolminnesota/> – April 2007.
- Consulted by the Ministry of Children and Youth Services, regarding the certification of instructors – May 2006.
- Consulted by the Royal Canadian Mounted Police, Excited Delirium National Working Group, regarding policy development and training on Excited Delirium and related Sudden Deaths – May 2007.
- Consulted by the Royal Canadian Mounted Police, Subject Behaviour / Officer Reporting Policy Working Group - May 2007.
- Collaborated in the design and development of a video training package for the Ontario Police Video Training Alliance regarding police response to excited delirium – August 2007.
- Consulted by the Royal Canadian Mounted Police with respect to safety of Conducted Energy Weapons, Excited Delirium, and Sudden In-Custody Deaths.
- Appointed to the Working Group - Canadian Police Research Centre, National Research Council, 2008 Update on Conducted Energy Devices – January 2008.
- Co-facilitated National Incident Management Intervention Working Group Meeting, RCMP Pacific Region Training Centre – January 2008.
- Appointed to the Royal Canadian Mounted Police, National Working Group, Incident Management Intervention – January 2008.
- Collaborated on presentation to Federal, Territorial, Provincial Assistant Deputy Ministers Meeting – Conducted Energy Devices and Sudden Deaths – January 2008.
- Consulted by the Royal Canadian Mounted Police with respect to revising the Incident Management Intervention Model, RCMP HQ – February 2008.
- Commissioned Kentucky Colonel by Governor Steven L. Beshear – March 2008.
- Consulted by the Baltimore County Police Department, **Maryland** in developing training related to controlling subjects experiencing crisis – May 2008.
- Consulted by the Department of Mental Health and Addictions Services, State of Connecticut regarding an Action Response Use of Force Continuum – August 2008.
- Consultant to Public and Police Safety Committee (formerly the National Incident Management Intervention Working Group) Meetings
 - June 2008 – CFB Halifax
 - March 2011 – PRTC Chilliwack
- Retained by the Nova Scotia Department of Justice to assist in developing interim policy or governance standard on police use of conducted energy weapons – July 2008.
- Facilitator - Force Science Centre Certification Course (Human Factors and Use of Force Analysis, Since 2008).
- Appointed to Conducted Energy Weapons Training Design Working Group, Ministry of Community Safety and Correctional Services, Ontario – November 2008 – Present.
- Participant – Canadian Association of Chiefs of Police Invitational Workshop on Conducted Energy Devices, Orillia, ON – January 2009.

- Collaborated with Chuck Remsburg and Greg Meyer on article (Remsburg, C. [2009]. FORCE SCIENCE NEWS: Transmission #127 - Research roundup: Latest on Tasers, Arrest-Related Deaths, Excited Delirium – July 2009.
- Instructor - Force Science Centre Certification Course (Human Factors and Use of Force Analysis): Fundamentals of Human Performance: (beginning June 2010); Vision (beginning February 2012).
- Participated in the review of the Police Executive Research Forum's 2005 Conducted Energy Device (CED) guidelines, Philadelphia, **Pennsylvania** – August 2010.
- Participated in the re-design of policy and training for the Royal Canadian Mounted Police with respect to Conducted Energy Weapons, and Excited Delirium, Ottawa, Ontario – November 2010 & February 2011.
- Participated in a workshop to develop Operational Requirements for Less-Lethal Weapons for Canadian Police Officer Use, Defence Research Development Canada, Toronto, Ontario – January 2011.
- Participated in a workshop to develop an outline for a National Use of Force Subject Matter Expert Program for the RCMP, Chilliwack, **British Columbia** – March 2011.
- Appointed to the working group addressing Use of Force Skills Perishability, Police Sector Council, Toronto, Ontario – May 2011.
- Publication Reviewer, Christmas, R. (2013). *Canadian Policing in the 21st Century: A Frontline Officer on Challenges and Changes*. McGill-Queen's University Press, Kingston, ON.
- Consulted by Sous-comité consultatif permanent en emploi de la force, Province of Quebec, regarding a transition to the National Use of Force Framework, École nationale de police du Québec, Nicolet, Quebec – May 2012.
- Subject Matter Expert for Standardized Security Guard Training and Developer of eLearning Program, Ministry of Community safety and Correctional Services, Ontario: April 2011-July 2012.
- Subject Matter Expert for Update on Front Line Response to Subjects Experiencing Excited Delirium and Developer of eLearning Program, Ministry of Community safety and Correctional Services, Ontario: July-December 2012.
- Consulted on Development of a Use of Force Expert Witness Training Program, Royal Canadian Mounted Police, Ottawa, Ontario – February 2014.
- Appointed as a Research Affiliate, Police Research Lab, Department of Psychology, Carleton University – Ottawa, ON – April 2016.

INTERVIEWS

- Live interview CBC Radio, Dave Stevens Show – Excited Delirium and Sudden Custody Death - 1998.
- Taped interview CBC Radio, “This Morning”, Host Avril Benoit – Positional Asphyxiation – October 19, 1998;
http://www.cbc.ca/insite/THIS_MORNING_TORONTO/1998/10/19.html
- Taped interview CBC Radio, “This Morning” – Police Pepper Spray Training - 1998.
- Video interview: ALERT Publishing Inc., “ASLET Promotional DVD” – Sudden In-Custody Deaths – January 2004.

- Force Science News: #29 – 10 Training Tips for Handling Excited Delirium –October 7, 2005; <http://www.policeone.com/writers/columnists/ForceScience/articles/119828/>
- Eric Mortenson, The Oregonian, October 30, 2005; – Man killed by police possibly ill, <http://www.oregonlive.com/morenews/oregonian/index.ssf?/base/news/113058154055310.xml>.
- Chuck Remsburg, Street Survival Newslne, Do's And Don'ts of Handling "Excited Delirium" Suspects, Part I – May 31, 2006; <http://www.policeone.com/writers/columnists/CharlesRemsburg/articles/134670/>
- Chuck Remsburg, Street Survival Newslne, Do's And Don'ts of Handling "Excited Delirium" Suspects, Part II – June 13, 2006; <http://www.policeone.com/edp/articles/134671>.
- Force Science News: #47 - One Officer's Wild Encounter With "Excited Delirium"– June 26, 2006; <http://www.policeone.com/writers/columnists/ForceScience/articles/138451/>.
- Live interview, CBC Radio, The Calgary Eyeopener Show (Host, Jim Brown) - Conducted Energy Devices – September 1, 2006.
- Force Science News: #55 – Excited Delirium Gets More Complicated– October 6, 2006.
- Sarah Etter, Corrections.com "Your worst nightmare", February 28, 2006. <http://www.corrections.com/news/article.aspx?articleid=15195>.
- Live interview CBC Radio, Information Morning, Dave McDonald– Excited Delirium, Moncton, New Brunswick – March 6, 2007.
- Live interview CBC Radio, Barbara Roberts– Excited Delirium, Fredericton , New Brunswick – March 6, 2007.
- Force Science News: #67 - Is Excited Delirium a fake condition invented to whitewash abusive force? A Critical Look at NPR's Recent Reports – March 10, 2007 & April 9, 2007 - <http://www.policeone.com/less-lethal/articles/1235660/>.
- Sandra Bartlett, CBC Radio, Toronto, Excited Delirium – September 21, 2007.
- Sandra Bartlett, CBC Radio & CBC Television, Toronto, Excited Delirium and Subject Control Tactics – November 7, 2007.
- Terry Milewski; CBC Television, Excited Delirium and Sudden In-Custody Deaths – November 28, 2007.
- Omar El Akkad, Globe and Mail, Excited Delirium and Sudden Deaths – November 29, 2007.
- Force Science News: #87 – "Canadian Response" technique brings quick restraint of combative, super-strong subjects" <http://www.policeone.com/writers/columnists/ForceScience/articles/1640535/> - December 17, 2007.
- Jessica Murphy; October 7, 2008: published in The Métropolitain, *Excited Delirium* – October 16, 2008; Vol. I, No 12, p.11.
- Mike Blanchard; Roy Green Show, Corus Radio Network, *Tasers and Police Use of Force*, July 25, 2009.
- Force Science News: #175 – ED expert seeks your experience with "bath salts" drug abusers - <http://www.forcescience.org/fsnews/175.html>. April 8, 2011.
- Force Science News: #218 – "Looming: Important consideration when cops fire at moving cars" - <http://www.forcescience.org/fsnews/218.html>. December 7, 2012.
- Force Science News: #220 – "Looming question" - <http://www.forcescience.org/fsnews/220.html>. January 3, 2013

- Force Science News: # 282 – “Spreading the word about use-of-force realities.” May 18, 2015.

PRESENTATIONS

- Bramalea Limited, National Security Managers Conference on Use of Force and their Use of Force Policy; Toronto, **Ontario** - 1994.
- Lioness Club, Personal Safety Issues for Women; Belmont, **Ontario** - 1997.
- Canadian Association of Police Educators, National Use of Force Framework; Sudbury, **Ontario** - August 2000.
- Association of Natural Resource Enforcement Trainers, Use of Interactive Judgment Training Simulators in Law Enforcement Training; Winnipeg, **Manitoba** - 2000.
- Royal Canadian Mounted Police, Hobble Restraints and Sudden In-Custody Death Investigations; Regina, **Saskatchewan** - July 2002.
- International Association of Chiefs of Police 109th Annual Conference, Sudden In-Custody Death – Beyond Positional Asphyxia – A Systems Based Approach; Minneapolis, **Minnesota** - October 2002.
- Royal Newfoundland Constabulary on Sudden In-Custody Death Investigation and Controlling Subject's in Excited Delirium; St. John's **Newfoundland** – December 2002.
- American Society of Law Enforcement Training Annual Conference, Canada's National Use of Force Framework – Development and Implementation; Ontario, **California** - January 2003.
- National Criminal Justice Training Council Conference, Investigating Sudden In-Custody Deaths; Chicago, **Illinois** - April 2003.
- International Conference on Special Needs Offenders (Canada), Not Just Another Call - Police Response to Persons with Mental Illnesses; Toronto, **Ontario** - July 2003.
- PPCT Management Systems Inc. Annual Conference, Investigating Sudden In-Custody Deaths; St. Louis, **Missouri** - August 2003.
- International Academy of Law and Mental Health 28th International Congress, Investigating Sudden In-Custody Deaths – Beyond Positional Asphyxia A Systems Based Approach; Sydney, New South Wales, **Australia** - October 2003.
- New South Wales Police Headquarters, Officer Safety and Safe Custody Practice; Sydney, **Australia** - October 2003.
- American Society of Law Enforcement Training Annual Conference, Sudden In-Custody Death – Beyond Positional Asphyxia – A Systems Based Approach; St. Louis **Missouri** - January 2004.
- Psychiatry Grand Rounds, London Health Sciences Centre, Sudden and Unexpected Death during Resistive Patient Restraint; London, **Ontario** - February 2004.
- International Law Enforcement Educators and Trainers Association Conference, Investigator Protocol: Sudden In-Custody Deaths; Chicago **Illinois** - April 2004.
- Ministry of Community Safety and Correctional Services, Bell Cairn Staff Development Training Centre on use of force issues including OC, batons, sudden in-custody death and subject control; Hamilton, **Ontario** – July 2004.
- Canadian Association of Chiefs of Police Annual Conference, Canadian Police Research Centre Taser Workshop; Vancouver, **British Columbia** – August 2004.

- Ontario Association of Police Educators Annual Conference, Investigator Protocol: Sudden In-Custody Deaths; Aylmer, **Ontario** – August 2004.
- Calgary Police Service (Calgary Emergency Medical Services; Calgary Regional Health Association; Office of Chief Medical Examiner, Alberta; Camrose, Edmonton, Lethbridge Regional, Medicine Hat, Victoria Police Services, Royal Canadian Mounted Police); Excited Delirium: Investigators Protocol Seminar; Calgary, **Alberta** – August 2004.
- Toronto Police Service, Emergency Task Force, Sudden and Unexpected Deaths Relating to Subject Restraint; Toronto, **Ontario** – September & November 2004.
- Bruce Nuclear Facility Tactical Team: Oleoresin Capsicum Use; Sudden and Unexpected Deaths Relating to Subject Restraint; Aylmer, **Ontario** – September 2004.
- International Municipal Lawyers Association 69th International Conference, “Hot Topics” Expert Panel; San Antonio, **Texas** – October 2004.
- Panelist, Taser and Medical Review Meeting, British Columbia Office of the Public Complaints Commissioner, Taser Review Team; Victoria, **British Columbia** – October 2004.
- Psychiatry Grand Rounds, London Health Sciences Centre, Taser and Psychiatry; London, **Ontario** – November 2004.
- American Society of Law Enforcement Training Annual Conference, Prisoner Transport and Restraint Issues; Jacksonville, **Florida** – January 2005.
- Great Lakes Forest Fire Compact, International Simulation Conference,
 - “Simulation - Is it the Right Tool for You?”
 - “Scenario Development and Documentation”
 - “Q&A Panel”
 Wausau, **Wisconsin** – February 2005.
- Special Investigations Unit, Ministry of the Attorney General, Quarterly Training Session, Police Use of Force Training; Mississauga, **Ontario** – March 2005.
- Las Vegas Metropolitan Police Department, Sudden Unexpected Deaths – Investigators Protocol; Las Vegas, **Nevada** – May 2005.
- Correctional Investigation and Security Unit, Ministry of Community Safety and Correctional Services, Investigators Protocol – Sudden In-Custody Deaths; Peterborough, **Ontario** – June 2005.
- In-Service Use of Force Instructor Re-certification Conference, Ministry of Community Safety and Correctional Services, Survival Stress and Program Design & Presentation; Toronto, **Ontario** – September 2005.
- Canadian Officer Safety Conference,
 - Expert Panel - Excited Delirium & Sudden In Custody Death Syndrome - Victoria Police Study.
 - Expert Panel - An Eye to the Future - Leading Edge Research in Law Enforcement Safety Training.
 - Coaching & Feedback for Motor Skills Development.
 Victoria, **British Columbia** – September 2005.
- Peel Regional Police Service, Tactical and Rescue Unit, Sudden and Unexpected Deaths Relating to Subject Restraint; Mississauga, **Ontario** – November 2005.
- York Regional Police Service, Training Bureau & Tactical and Rescue Unit, Sudden and Unexpected Deaths Relating to Subject Restraint; Mississauga, **Ontario** – January 2006.

- Sarnia Police Service, (Sarnia /Port Huron Region), Excited Delirium Update: Sarnia, **Ontario** – January 2006.
- Southeastern District Crisis/Psychiatric Emergency Services Working Group; Belleville Police Service; Crisis Intervention for Hastings/Prince Edward; - Excited Delirium, Ontario Cases Reviewed: Belleville, **Ontario** – March 2006.
- City of Sevierville / East Tennessee Chapter of Tennessee Public Risk Management Association / Fort Sevier Medical Center, Excited Delirium & In-Custody Death Issues; Excited Delirium: Potential Causes of Death: Sevierville, **Tennessee** – March 27-29, 2006.
- Wyoming Law Enforcement Academy, Custody and Control Instructor Re-certification & Update, Training Issues for the Prevention of In-Custody Death – Douglas, **Wyoming** – April 2006.
- Sunnybrook – Osler Centre for Pre-Hospital Care, Continuing Education for Paramedics, Excited Delirium and In-Custody Death Issues – Brampton, **Ontario** – June 2005; February, April, June 2006.
- International Law Enforcement Educators and Trainers Association Conference
 - Excited Delirium: A Scientific Study
 - Coaching & Feedback for Motor Skills Development.
 Chicago, **Illinois** - April 2006.
- Deputy Sheriff's Association of Michigan Annual Conference, Excited Delirium and In-Custody Death Issues – Pt. Huron, **Michigan** – May 2006.
- National Sheriff's Association Annual Conference, Excited Delirium: Response to Aggressive Subjects Experiencing Crisis – Orlando, **Florida** – June 2006.
- International Association of Chiefs of Police 113th Annual Conference, Boston, **Massachusetts** – October 2006.
 - Police Physician Section: - Conducted Energy Weapons Panel.
 - Canada's National Use of Force Framework: A Pattern for Success.
- Deputy Sheriff's Association of Michigan, Public Safety Response to Excited Delirium – Midland, **Michigan** – October 2006.
- Lanark County Mental Health L.E.A.D. (Lanark County, Emergency Department, Ambulance Service and Diversion Program) – Excited Delirium, Ontario Cases Reviewed, Smith Falls, **Ontario** – October 2006.
- Lanark County Mental Health, Excited Delirium Deaths for Physicians, Nurses and Paramedics – Smith Falls, **Ontario** – October 2006.
- Florida Sheriff's Association, Jail Administrator's Workshop – In-Custody Death; Excited Delirium: Response to Aggressive Inmates Experiencing Crisis – Jacksonville, **Florida** – December 2006.
- American Correctional Association, Annual Winter Conference – Excited Delirium: Response to Aggressive Inmates Experiencing Crisis – Tampa, **Florida** – January 2007.
- Special Investigations Unit, Ministry of the Attorney General, Quarterly Training Session, Police Response to Excited Delirium and Other Medical Issues; Mississauga, **Ontario** – March 2007.
- Wyoming Law Enforcement Academy, 27th Annual Administrators Conference, Causes and Prevention of In-Custody Deaths – Douglas, **Wyoming** – April 2007.
- Illinois State Police, Internal Affairs Division, Internal Investigations and Ethics Symposium, Investigation of Excited Delirium Deaths - Springfield, **Illinois** – April 2007.

- International Law Enforcement Educators and Trainers Association Conference
 - Excited Delirium: 2007 ILEETA Update
 - Canada's National Use of Force Framework: A Pattern for Success. Chicago, *Illinois* - April 2007.
- Metropolitan London Police, Directorate of Professional Standards, Sudden In-Custody Deaths – London, *England* – April 2007.
- Metropolitan Police Federation, Sudden In-Custody Deaths, Research and Recommendations – London, *England* – April 2007.
- Florida Sheriff's Association, Administrative Management Training Seminar,– In-Custody Death: Excited Delirium – Daytona Beach, *Florida* – June 2007.
- National Sheriff's Association Annual Conference, Sudden In-Custody Deaths: What Can Be Done to Avoid Them? – Salt Lake City, *Utah* – June 2007.
- Macomb Community College, Criminal Justice Training Centre, Excited Delirium: Response to Aggressive Subjects Experiencing Crisis – Clinton Township, *Michigan* – October 2007.
- Lexington Division of Police, Excited Delirium: Response to Aggressive Subjects Experiencing Crisis – Lexington, *Kentucky* – October 2007.
- Chattanooga Police, Excited Delirium: Response to Aggressive Subjects Experiencing Crisis – Chattanooga, *Tennessee* – October 2007.
- International Association of Chiefs of Police 114th Annual Conference, New Orleans, *Louisiana* – October 2007.
 - Police Physician Section: - In-Custody Death Investigation.
 - Police Physician Section: - Excited Delirium Panel.
- Royal Canadian Mounted Police, Headquarters Communication Staff, Conducted Energy Weapons, Sudden In-Custody Deaths and Excited Delirium Syndrome – Ottawa, *Ontario* – November 2007.
- Royal Canadian Mounted Police, Technical Briefing for Commissioner William Elliott and Deputy Minister of Public Safety Suzanne Hurlbut, Conducted Energy Weapons, Sudden In-Custody Deaths and Excited Delirium Syndrome – Ottawa, *Ontario* - November 2007.
- Institute for the Prevention of In-Custody Deaths, Canadian Police Response to Excited Delirium: Effective Subject Control, Las Vegas, *Nevada* – November 2007.
- American Correctional Association, Annual Winter Conference – Excited Delirium: Response to Aggressive Inmates Experiencing Crisis – Grapevine, *Texas* – January 2008.
- Royal Canadian Mounted Police, British Columbia Major Crime Units Investigation Seminar– Excited Delirium: Use of Force and Investigation – Kelowna, *British Columbia* – January 2008.
- Association of Training Officers of Minnesota, Annual Winter Conference – Excited Delirium: Response to Aggressive Subject's Experiencing Crisis – Minneapolis, *Minnesota* – January 2008.
- Kentucky Department of Criminal Justice Training Center, Annual Instructor's Conference – Excited Delirium and Sudden In-Custody Deaths – Richmond, *Kentucky* – March 2008.
- International Law Enforcement Educators and Trainers Association Conference - Excited Delirium: Subject Control Techniques - Chicago, *Illinois* - April 2008.
- Guelph Police Service - Recognizing the Signs: Excited Delirium – Guelph, *Ontario* – May 2008.

- East Central Illinois Mobile Training Unit 12, Illinois Law Enforcement Training and Standards Board – Excited Delirium: Response to Aggressive Subject’s Experiencing Crisis – Champaign, **Illinois** – May 2008.
- Canadian Association of Police Educators, Simulator Research; Moncton, **New Brunswick** - June 2008.
- Barrie Police Service, Senior Officer Training - Recognizing the Signs: Excited Delirium – Barrie, **Ontario** – June 2008.
- National Sheriff’s Association Annual Conference, Sudden In-Custody Deaths: What Can Be Done to Avoid Them? – Indianapolis, **Indiana** – July 2008.
- Canadian Association of Police Service Boards, Annual Conference, Conducted Energy Weapons Workshop – Toronto, **Ontario** – August 2008.
- International Homicide Investigators Association, Annual Conference, The Human Dynamics of Deadly Force Encounters: Debunking Myths by Applying Science – St. Louis, **Missouri** – August 2008.
- MidStates Organized Crime Information Center, Annual Conference, In-Custody Deaths – Lincoln, **Nebraska** – September 2008.
- OnScene 2008 Conference (Police, Fire, EMS), Excited Delirium – Regina, **Saskatchewan** – September 2008.
- Institute for Law Enforcement Administration, Police Use of Force: Less-Lethal Weapons and In-Custody Death Conference, Sudden Death Investigations – Plano, **Texas** – September 2008.
- Bluewaterland Emergency Care Conference, Excited Delirium and the Relationship to Sudden Deaths – Sarnia, **Ontario** – October 2008.
- Association of Training Officers of Minnesota, – Excited Delirium: Response to Aggressive Subject’s Experiencing Crisis – Plymouth, **Minnesota** – October 2008
- East Central Illinois Police Training Project Mobile Training Unit 12, Illinois Law Enforcement Training and Standards Board – Excited Delirium: Response to Aggressive Subject’s Experiencing Crisis – Urbana, **Illinois** – November 2008.
- East Central Illinois Police Training Project Mobile Training Unit 13, Illinois Law Enforcement Training and Standards Board – Excited Delirium: Response to Aggressive Subject’s Experiencing Crisis – Effingham, **Illinois** – November 2008.
- Canadian Association of Chiefs of Police Invitational Workshop on Conducted Energy Devices – Research, Science and Medicine Associated to Conducted Energy Devices – Orillia, **Ontario** – January 2009.
- Buckeye State Sheriffs’ Association – Excited Delirium: Response to Aggressive Subject’s Experiencing Crisis – Columbus, **Ohio** – February 2009.
- Southern Illinois Criminal Justice Summit – Excited Delirium: Understanding and Preparing for Intervention – Mt. Vernon, **Illinois** – February 2009.
- International Law Enforcement Educators and Trainers Association – Sudden In-Custody Research Update – Chicago, **Illinois** – April 2009.
- International Law Enforcement Educators and Trainers Association – The Human Dynamics of Deadly Force Encounters: Debunking Myths by Applying Science – Chicago, **Illinois** – April 2009.
- Canadian Centre for the Prevention of In-Custody Deaths - Recognizing the Signs: Excited Delirium – Niagara Falls, **Ontario** – May 2009.

- Stark County Sheriff's Department - Excited Delirium: Response to Aggressive Subject's Experiencing Crisis – Canton, **Ohio** – June 2009.
- Butler County Sheriff's Department - Sudden In-Custody Deaths: What Can Be Done to Avoid Them?, West Chester, **Ohio** – June 2009.
- Winning Mind Training – Sudden In-Custody Deaths and Excited Delirium, What's Goin' On. Calgary, **Alberta** – September 2009.
- Institute for the Prevention of In-Custody Deaths, Introduction to Forensic Pharmacy, Las Vegas, **Nevada** – November 2009.
- Association of Training Officers of Minnesota, Use of Force Seminar – Excited Delirium and In-Custody Death Update – Plymouth, **Minnesota** – March 2010.
- International Law Enforcement Educators and Trainers Association – Sudden In-Custody Research Update – Chicago, **Illinois** – April 2010.
- Ontario Provincial Police, Annual In-Service Training Instructor Update – Orillia, **Ontario** – May 2010.
 - Excited Delirium Update
 - Instructing vs Coaching in Police Training
 - Legal Updates in Police Use of Force
- Association of Training Officers of Minnesota, Winter Leadership Conference – Instructor and Program Development – Minneapolis, **Minnesota** – February 2011.
- Delaware State Police, Law Enforcement to Mental Illness Training Conference, Law Enforcement Response to Excited Delirium – Dover, **Delaware** – April 2011.
- Police Sector Council, Police Use of Force – Myth vs. Fact – Toronto, Ontario – May 2011.
- International Association of Chiefs of Police 118th Annual Conference, Contemporary Issues in Use of Force, Panelist; Chicago, **Illinois** – October 2011.
- Southeast Regional Warriors Conference – The Science of Force; Discussion Panelist; Orlando, **Florida** – February 2012.
- Introduction of new weapons for law enforcement: the assessment process and practical issues that would be raised by “Incapacitating Chemical Agents”, International Committee of the Red Cross – Montreux, **Switzerland** – April 2011.
- Sous-comité consultatif permanent en emploi de la force, National Use of Force Framework, Development and Implementation, École nationale de police du Québec, Nicolet, **Quebec** – May 2011.
- Ontario Crown Attorney's Summer School – Using Use of Force Experts; London, Ontario – July 2012.
- Saskatchewan Crown Attorneys Association Conference – Using Use of Force Experts; Saskatoon, **Saskatchewan** – November 2012.
- International Law Enforcement Educators and Trainers Association – Evidence Based Training for Police Physical Skills – Chicago, **Illinois** – April 2013.
- International Association of Chiefs of Police 120th Annual Conference, Legal Officers Section – Hot Button Issues in Use-of-Force Litigation: Officer Induced Jeopardy and Motor Vehicle Movement Capacity – Philadelphia, **Pennsylvania** – October 2013.
- Royal Canadian Mounted Police, Expert Evidence Workshop – Perspective on Providing Expert Evidence; Ottawa, **Ontario** – February 2014.
- Office of the Independent Police Review Director – Police Use of Force Training in Ontario; Toronto, **Ontario** – March 2014.

- Ontario Crown Attorney's Summer School – Ontario Use of Force Model; Excessive Force by Police, A Case Study. London, **Ontario** – August 2014.
- International Law Enforcement Forum – Managing Potentially Violent Encounters and Policing with the Community, Dealing with Armed Subjects in Crisis. Update on Canadian Issues and Perspectives. Dublin & Derry-Londonderry, **Northern Ireland** – Sep 2014.
- International Association of Law Enforcement Educators and Trainers Annual Conference – In-Custody Death Research Updates, Chicago, **Illinois** – Apr 2015.
- Canadian Association for Civilian Oversight of Law Enforcement Annual Conference – Use of Force Training: Challenges and Successes, Ottawa, **Ontario** – May 2015.
- 8th European Non-Lethal Weapons Symposium – Lessons Learned From Deployment of Conducted Energy Weapons in Canada; Ettlingen, **Germany** – May 2015
- The Canadian Institute, Law of Policing Conference, An Update on Use of Force – Ensuring the Line is Not Crossed, Toronto, **Ontario** – June 2015.
- International Association of Chiefs of Police 122nd Annual Conference, 2011 Truth & Fiction in Positional and Restraint Asphyxia during Arrest; Chicago, **Illinois** - October, 2015.
- Journées Annuelle Des Coach's Communauté de pratique, Des Pratiques Policières; 'Legacy' and Public Trust in Their Police; Service de Police de la Ville de Montréal, **Quebec**.

PUBLICATIONS

- Lawrence, C. W. (1987). Marine Operators Training Manual. Mississauga, ON: Peel Regional Police.
- Ontario Police College. (1999). Defensive Tactics Student Manual. Toronto, ON: The Queen's Printer.
- Canadian Association of Chiefs of Police. (2000). The National Use of Force Framework. Ottawa, ON: CACP.
- Ontario Police College. (2001). Defensive Tactics Instructor Guide. Toronto, ON. The Queen's Printer.
- Lawrence, C. W.. & Cairns, J. T. (2001). Sudden Custody Death: The Ontario Perspective. *RCMP Gazette*, 63(5), 33-35.
- Lawrence, C., & Mohr, W. K. (2002,) Sudden In-Custody Death – Beyond Positional Asphyxia – A Systems Based Approach [Abstract]. *The Police Chief Vol. LXIX, No.10, p.30*.
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- Lawrence, C. (2004, April 6). Sudden and Unexpected Deaths - Beyond Positional Asphyxia. *Newsline*, 692. Carrollton, TX: Calibre Press, Inc.
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- Lawrence, C. (2004). Walking With Warriors. In L. W. Christensen (Ed.), *Warriors: On Living with Courage, Discipline, and Honor* (pp. 43-49). Boulder, CO: Paladin Press.
- Ontario Police College. (2004). Coach Officer's Guide to Defensive Tactics. Toronto, |ON. The Queens Printer.

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- Lawrence, C. Police Response to Excited Delirium, Royal Roads University, 2005.
- Lawrence, C. (2005, November 7). The Varied Faces of Excited Delirium. *PoliceOne.com*.
<http://www.policeone.com/writers/columnists/clawrence/articles/120458/>.
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<http://www.policeone.com/legal/articles/121675/>.
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<http://www.policeone.com/writers/columnists/ChrisLawrence/articles/1182796/>.
- Lawrence, C. (2007, August 20). The Thomas Theorem: Front Line Response to Excited Delirium. *PoliceOne.com*. <http://www.policeone.com/edp/articles/1269684/>.
- Lawrence, C. (2007). Some Thoughts on Warrior Scholars and Their Role. In B. R. Willis (Ed.), *W.I.N. Critical Issues in Training and Leading Warriors*. (pp. 186-196). Calgary, AB: Warrior Spirit Books.
- Stuart, B. & Lawrence, C. (2007). *Report on Conducted Energy Weapons and Excited Delirium*. Ottawa, ON. Royal Canadian Mounted Police. http://www.rcmp-grc.gc.ca/ccaps/cew/cew_edp_report_e.htm
- Lawrence, C. (2008). Commentary on Conducted Energy Weapon Safety and Associated Research. *Law Enforcement Executive Forum Journal*, 8(4), 21-30.
- Lawrence, C. (2008). *Sudden, Unexpected Deaths & Excited Delirium: First Responders Evidence Collection Protocol*. (No. TR-01-2008). Ottawa, ON. Canadian Police Research Centre.
- Artwohl, A. & Lawrence C. (2008). Book Review - "Riding to the Rescue, The Transformation of the RCMP in Alberta and Saskatchewan, 1914-1939", *International Criminal Justice Review*, 18(4), 487-488.
- Johnston, J., Stuart, B. & Lawrence, C. (2009). Police Use of Conducted Energy Weapons in Canada. *Law Enforcement Executive Forum* 2009 9(3), 51-72.
- Lawrence, C. (2010). A Police Compass. In B. R. Willis (Ed.), *If I Knew Then: Life Lessons From Cops on the Street*. (pp. 33-40). Calgary, AB: Warrior Spirit Books.
- Lawrence, C. (2010). The Open Police University. In B. R. Willis (Ed.), *If I Knew Then: Life Lessons From Cops on the Street*. (pp. 195-202). Calgary, AB: Warrior Spirit Books.
- Lawrence, C. (2010). *Police Use of Force: Integrating Law, Training and Research*. Paper presented at the Law of Policing Conference, Toronto, ON: C5Group.

- Lawrence, C. (2011). Developing Expertise While Maintaining the Work-life Balance. In B. R. Willis (Ed.), *If I Knew Then-2: Life Lessons From Cops on the Street*. Calgary, AB: Warrior Spirit Books.
- Lawrence, C. W., & Wray, N. (2015). *Re-Purposing Existing and Familiar Technologies - A Success Story*. Poster presented at the 8th European Non-Lethal Weapons Symposium, Ettlingen, Germany.
- Lawrence, C. W. (2015). *Lessons Learned From Deployment of Conducted Energy Weapons in Canada*. Paper presented at the 8th European Non-Lethal Weapons Symposium, Ettlingen, Germany.
- Lawrence, C. W. (2015). *An Update on Use of Force - Ensuring The Line is Not Crossed*. Paper presented at the Canadian Institute's 6th Annual Conference on The Law of Policing, Toronto, ON.
- Baldwin, S., Hall, C., Bennell, C., Blaskovits, B. & Lawrence, C. (2016). Distinguishing Features of Excited Delirium Syndrome in Non-Fatal Use of Force Encounters. *Journal of Forensic and Legal Medicine, In Press*.

EXPERT EXPERIENCE

In addition to the below noted cases I have also been retained or consulted for prosecution, defense, and plaintiffs in over 170 other matters relating to police procedures, police use of force, police training, and/or in-custody deaths with respect to criminal trials and investigations, civil litigation, public inquiries, and/or professional standards investigations in the following jurisdictions:

Alberta	Alabama	Minnesota	England
British Columbia	Arizona	Nevada	
Nova Scotia	California	Ohio	
Ontario	Colorado	Texas	
Quebec	Florida	Utah	
Newfoundland	Illinois	Wyoming	
Saskatchewan	Kansas		
	Michigan		

- Dec. 2015 **Testified** as an expert for the Defense relating to police procedures, police training, police use of force, and behavioral science factors, **Deposition**, Palm Beach, Florida, **United States District Court, for the Southern District Of Florida**; Civil Action No. 9:15-cv-80521-DMM; Pavlov & Pollow v. Bradshaw, et al., Palm Beach, **Florida**.
- Oct. 2015 **Testified** as an expert for the Coroner regarding police training relating to Defensive Tactics, Officer Safety, Firearms, High Risk Vehicle Stops and Conducted Energy Weapons. Coroner's Inquest, Zoltan Hyacinthe; Toronto, Ontario.
- Jul. 2014 **Testified** as an expert for Defense regarding police training, police use of force, police procedures: Bell v. Bond et al; Civil Action No. 3:10-Cv-01852-D; Trial,

United States District Court, Northern District of Alabama, Middle Division, Anniston, **Alabama**.

- Apr. 2015 **Testified** as an expert for Defense regarding police training, police use of force, police procedures; R. v. Harris & Hendrick, Ontario Court of Justice, London, Ontario.
- Jan. 2015 **Testified** as an expert for the Crown regarding police use of force. Johnathan Rawlings Fatality Inquiry, Calgary, **Alberta**.
- Dec. 2014 **Testified** as an expert for the Coroner regarding police training, police procedures, police use of force, excited delirium, in-custody deaths. Coroner's Inquest, Christopher Coffey; Walkerton, Ontario.
- Oct. 2014 **Testified** as an expert for the Defence regarding Force Science principles, vehicle movement, and visual looming: State v. Cowley; Case No.: 141906795; Preliminary Hearing, Third Judicial District Court Salt Lake County, **Utah**.
- Sep. 2014 **Testified** as an expert for the Coroner regarding police use of force, defensive tactics, firearms and officer safety: Coroner's Inquest, Wieslaw Duda; Toronto, Ontario.
- Sep. 2014 **Testified** as an expert for the Defense regarding police use of force, Chief Constable of the Toronto Police Service. v. Chouryguine, Police Service Act Hearing, Toronto, Ontario.
- May. 2014 **Testified** as an expert for the Coroner regarding police use of force, police training and police procedures: Coroner's Inquest, Mr. Douglas Minty; Midhurst, Ontario.
- Feb. 2014 **Testified** as an expert for the Coroner regarding police use of force, defensive tactics, and officer safety: Coroner's Inquest, Mr. McGivillari; Toronto, Ontario.
- Dec. 2013 **Testified** as an expert for the Defense relating to police use of force: Latkin v. City of Vancouver et al, Supreme Court of British Columbia, Vancouver Registry No.: S080395, Vancouver **British Columbia**.
- Nov. 2013 **Testified** as an expert for the Coroner regarding use of force; Coroner's Inquest, Mr. Keith Prescod; Toronto, Ontario.
- Oct 2013 **Testified** as an expert for the Defense relating to police procedures, police training, police use of force, behavioral science factors and Force Science principles, **Deposition**, Huntsville, Alabama, **United States District Court, for the Northern District Of Alabama**, Eastern Division; Civil Action No: 1:12-Cv-00096; Jones, vs. City Of Albertville, et al., Huntsville, **Alabama**.

- Jun. 2013 **Testimony** for the Defense entered into evidence as a **stipulation** relating to expert testimony in the field of police procedures and human performance, Wojkielewicz v. City of Chicago, et al.; **United States District Court for the Northern District of Illinois**, Court File No.: 1:11-cv-04737, Chicago, **Illinois**.
- May 2013 **Testified** as an expert for the Defense relating to behavioral science factors and Force Science principles, Utter v. Thompson and Unified Government; **Deposition**, St. Thomas, Ontario; **United States District Court for the District of Kansas**, Court File No.: 11-2360-KMV-KKH, Kansas City, **Kansas**.
- Jan. 2013 **Testified** as an expert for the Defense relating to behavioral science and Force Science principles, Wojkielewicz v. City of Chicago, et al.; **Deposition**, Chicago, Illinois; **United States District Court for the Northern District of Illinois**, Court File No.: 1:11-cv-04737, Chicago, **Illinois**.
- Apr. 2012 **Testified** as an expert for the Coroner, regarding police use of force training, high risk vehicle stops, police vehicle operations, human factors associated with police use of force, Coroner's Inquest, Cst. Vu Pham and Mr. Fred Preston, London, Ontario.
- Sep. 2011 **Testified** as an expert for the Prosecution regarding police use of force, Chief Constable of the Durham Regional Police Service. v. Turpin, Whitby, Ontario. Police Services Act Disciplinary Tribunal.
- May 2011 **Testified** as an expert for the Defense relating to police tactical procedures including arrest and police use of force, Wilsdon v. Durham (Regional Municipality) Police. Ontario Superior Court of Justice, Oshawa, Ontario. Court File No. 7499/01.
- May 2011 **Testified** as an expert for the Coroner, regarding police use of force, police training, excited delirium, sudden deaths, and conducted energy weapons; training, use and testing, Coroner's Inquest, Sean Reilly, Brampton, Ontario.
- Jan. 2011 **Testified** as an expert for the Defense relating to police procedures, police use of force, handcuffing and search, R. v. Marji, Ontario Superior Court of Justice, Toronto, Ontario. Court File No.:4814-998-09-70006314.
- Jan. 2010 **Testified** as an expert for the Defense, regarding police procedures, use of force, defensive tactics and related training, Halton Regional Police Services Board et al. a.t.s. Robert Curtis; Milton, Ontario. Ontario Superior Court of Justice, Court File No.: 01-BN-6960.
- May & Jul. 2009 **Testified** as an expert for the Coroner, regarding use of force, police use of force, police training, excited delirium, positional asphyxia, and conducted energy weapons, Coroner's Inquest, James Foldi, St. Catherines, Ontario.

Feb. 2009	Testified as an expert for the Defense relating to police training, use of force, and defensive tactics, R. v. Connor, Ontario Court of Justice, Court File No.: Newmarket, 3811-998-07-02026-00. Barrie, Ontario.
Dec. 2008	Testified as an expert for the Defense regarding Ontario police use of force training; police response to use of force; and the effects of human factors and human limitations under stress or limited information, Public Complaint Investigation OPP File No. 2545006-0097; Orillia, Ontario.
Nov. 2008	Testified as an expert for the Coroner regarding police training and police procedures, Coroner's Inquest, Robert Gourley, Toronto, Ontario.
Sep. 2008	Testified as an expert for Defense regarding police use of force; R. v. Brown & Leppard, London, Ontario.
Jun. 2008	Testified as an expert for the Coroner regarding police training, use of force, and excited delirium, Coroner's Inquest, Jerry Knight, Brampton, Ontario.
Mar. 2008	Testified as an expert for the Coroner regarding police use of force and excited delirium, Coroner's Inquest, Basil McIntosh, Waterloo Region, Ontario.
Feb. 2008	Testified before the Standing Committee On Public Safety and National Security, 39 th Parliament, 2 nd Session, regarding excited delirium, sudden in-custody deaths, and Taser use by police, Ottawa, Ontario.
Dec. 2007	Testified as an expert for the Coroner regarding police training, police use of force, defensive tactics and police procedures, Coroner's Inquest, O'Brien Christopher-Reid, Toronto, Ontario.
Nov. 2007	Testified as an expert for the Defense regarding police procedures; training; excited delirium; Taser®; Deposition for the Defense, Lomax Estate v. Las Vegas Metropolitan Police Department, et al. United States District Court , District of Nevada, Case No. CV-S-05-01464-PMP-RJJ; Las Vegas, Nevada .
Nov. 2007	Testified as an expert for the Coroner regarding police training, use of force and defensive tactics, Coroner's Inquest, Sean Mathew Trudeau, Gore Bay, Ontario.
Oct. 2007	Testified as an expert for the Coroner regarding excited delirium, positional asphyxia, and police use of force training, Coroner's Inquest, Stéphane Michaud, Ottawa. Ontario.
Nov. 2006	Testified as an expert for the Defense regarding police use of force, Ottawa Police Service Disciplinary Hearing, Professional Standards Section File No. 05-0284; Ottawa, Ontario.

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- Nov. 2006 **Testified** as an expert for the Coroner regarding police use of force training, police weapons and tactics, Coroner's Inquest, Otto Vass; Toronto, Ontario.
- Aug. 2006 **Testified** as an expert for the Defense regarding police use of force and defensive tactics, Public Complaint Investigation, OPP File No. 2531004-0349; Kingston, Ontario.
- Jun. 2006 **Testified** as an expert for the Coroner regarding police use of force, Coroner's Inquest, Michael Kolisnyk; Thunder Bay, Ontario.
- Jan. 2006 **Testified** as an expert for the Crown regarding defensive tactics and the straight arm bar takedown, R. v. Kennedy; Kitchener, Ontario.
- Dec. 2005 **Testified** as an expert for the Crown regarding police training in use of force, R. v. LaFrance; North Bay, Ontario.
- Sep. 2005 **Testified** as an expert for the Defense regarding police use of force, Ottawa Police Service Discipline Hearing, Professional Standards Section File No. 03-0489; Ottawa, Ontario.
- Aug. 2005 **Testified** as an expert for the Defense regarding police use of force and defensive tactics, relating to subject control and prisoner handling, Internal Discipline Hearing, OPP File No. 2545004-0109; Orillia, Ontario.
- Aug. 2005 **Testified** as an expert for the Defense regarding police use of force training; police defensive tactics; excited delirium; positional asphyxia; **Deposition** for the Defense (Detroit, **Michigan**). United States District Court, for the District of Wyoming. Estate of Bruce Weigel v. Wyoming Highway Patrol, Colonel John Cox, et al. Court File, Civil No. 04-CV-355J
- May 2005 **Testified** as an expert for the Coroner regarding police use of force training; police defensive tactics, including excited delirium and positional asphyxia; Coroner's Inquest, Peter Lamondy; London, Ontario.
- Mar. 2005 **Testified** as an expert for the Coroner regarding police use of force training; police defensive tactics; excited delirium; positional asphyxia; Coroner's Inquest, Nicholas Blentzas; Toronto, Ontario.
- Oct. 2004 **Testified** as an expert for the Defense relating to defensive tactics and the straight arm bar takedown, R. v. Lederman; Ontario Court of Justice, Court File No. 982/04, Kitchener, Ontario.
- Dec. 2002 **Testified** as an expert for the Royal Newfoundland Constabulary regarding police shooting, Reid - Power Public Inquiry; St. John's, **Newfoundland**.

Jul. 2002 **Testified** as an expert for the Coroner on police training, handcuffing and search of subjects in police custody, Coroner's Inquest, Vladislav Janic; Newmarket, Ontario.

Jun. 2002 **Testified** as an expert for the Coroner regarding a police shooting, Coroner's Inquest, Mark Graham; Toronto, Ontario.

Jun. 2002 **Testified** as an expert for the Coroner regarding a police shooting, Coroner's Inquest, Scott Reinhard; Brampton, Ontario.

Apr. 2002 **Testified** as an expert for the Defense in police use of force, Ontario Court of Justice, R v. Elvish, R v. Mulligan, R v Steudle; Thunder Bay, Ontario.

Dec. 2001 **Testified** as an expert for the Defense in police use of force, Ontario Court of Justice, R v. Thistlethwaite; Ontario Court of Justice, Coburg, Ontario.

Nov. 2001 **Testified** as an expert for the Crown in police use of force, Superior Court of Justice, R v. Reid; Brantford, Ontario.

Dec. 2000 **Testified** as an expert witness for the Coroner, Coroner's Inquest, in-custody death, Ted Ramaat; Toronto, Ontario.

Oct. 2000 **Testified** as an expert witness for the Coroner, Coroner's Inquest, in-custody death, Brian Bedard; Montreal, **Quebec**.

Jun. 2000 **Testified** as an expert witness for the Coroner, Coroner's Inquest, In-Custody Death; Beverly Ingraham; St. Catherines, Ontario.

Aug. 1996 **Testified** as an expert witness for the Coroner, Coroner's Inquest, in-custody death; Thomas Lorimer; St. Catherines, Ontario.

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Hourly Rate	Includes: reading, consultation, research & report writing	\$ 250.00
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Site Visit	(Flat Rate)	\$1000.00
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Travel Expenses include the following:

- Airfare (Economy)
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Travel Expenses will be reimbursed by PBSO with proof of receipt.

Deposition/Testifying	(Flat Rate, per day)	\$2000.00
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